

WORLDWIDE MARINE RADIOFACSIMILE BROADCAST SCHEDULES

**U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION**

NATIONAL WEATHER SERVICE

Oct 18, 2005

INTRODUCTION

A printed copy of this publication is distributed free of charge to all ships that participate in the U.S. Voluntary Observing Ship (VOS) program. If your ship is not participating in this worthwhile international program, we urge you to join. Remember, the meteorological agencies that do the weather forecasting cannot help you without input from you. **ONLY YOU KNOW THE WEATHER AT YOUR POSITION!!**

Please report the weather at 0000, 0600, 1200, and 1800 UTC as explained in the National Weather Service Observing Handbook No. 1 for Marine Surface Weather Observations.

Within 300 nm of a named hurricane, typhoon or tropical storm, or within 200 nm of U.S. or Canadian waters, also report the weather at 0300, 0900, 1500, and 2100 UTC. Your participation is greatly appreciated by all mariners.

For assistance, contact a Port Meteorological Officer (PMO), who will come aboard your vessel and provide all the information you need to observe, code and transmit weather observations.

Appendix C contains information on a PC software program known as AMVER/SEAS which greatly assists in coding and transmitting meteorological observations and AMVER position reports.

This publication is made available via Internet at:

<http://www.nws.noaa.gov/om/marine/home.htm>

This webpage contains information on the dissemination of U.S. National Weather Service marine products including radiofax, such as frequency and scheduling information as well as links to products. A listing of other recommended webpages may be found in the Appendix.

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ABOUT THIS PUBLICATION

The schedules contained in this book were obtained from official and unofficial sources. The information herein may neither be complete or accurate. Wherever possible, the schedules are dated with the latest change available. In several cases, unofficial reception reports have been received identifying the station as no longer being operational. The National Weather Service would like to thank everyone who provided assistance.

For ease of use, all stations are listed by WMO region, in alphabetical order, by country and location. All times listed herein are Universal Coordinated Time (UTC), unless otherwise indicated.

Unless otherwise stated, assigned frequencies are shown, for carrier frequency subtract 1.9 kHz. Typically dedicated radiofax receivers use assigned frequencies, while receivers or transceivers, connected to external recorders or PC's, are operated in the upper sideband (USB) mode using carrier frequencies.

For information on weather broadcasts worldwide, also refer to NGA Publication 117, the Canadian Coast Guard Radio Aids to Navigation (Canada Only) and the British Admiralty List of Signals, which are updated through Notices to Mariners. Information on these and other marine weather publications may be found in Appendix D. These publications are HIGHLY recommended.

This document also includes information on how to obtain National Weather Service text forecasts, graphic forecasts, and marine observations via the Internet and e-mail (FTPMAIL). Mariners are highly encouraged to explore these options.

The accuracy of this publication depends on YOUR input.

Please direct comments, recommendations, and corrections for this publication to:

Tim Rulon
National Weather Service W/OS21
1325 East-West Highway
Silver Spring, MD 20910 USA
1-301-713-1677 x128
1-301-713-1520 (fax)
timothy.rulon@noaa.gov
marine.weather@noaa.gov
<http://www.nws.noaa.gov/om/marine/home.htm>

AFRICA

NAIROBI, KENYA

CALL SIGNS	FREQUENCIES		EMISSION	POWER	
5YE	9044.9 kHz		F3C	6 KW	
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0010/-----	SIGWX FL250		120/576	1200	
0100/-----	SIGWX BELOW FL240 (1200) - FORM NO. 585A		120/576	0000	
0140/-----	TABULAR FORECAST- FORM NO. 2053		120/576	1200	
0540/-----	SIGWX FL100-250		120/576	1800	
0600/-----	SIGWX FL250		120/576	1800	
0630/-----	DMC-CHART		120/576	0000	
0645/-----	DMC-CHART		120/576	0600	
0800/-----	SIGWX BELOW FL240 - FORM NO. 585A		120/576	1200	
0830/-----	TEST CHART		120/57		
0844/-----	FL180 PRONOSTIC		120/576	0000	
0903/-----	FL300 PRONOSTIC		120/576	0000	
0922/-----	FL340 PRONOSTIC		120/576	0000	
0941/-----	FL390 PRONOSTIC		120/576	0000	
1017/-----	SIG WX FL100-250		120/576	0000	
----/1600	SIG WX FL250 (SEGMENT)		120/576	0600	
1037/-----	SIGWX FL250		120/576	0000	
1057/1638	SURFACE ANALYSIS		120/576	06/12	
1112/1653	850 HPA UPPER AIR ANALYSIS		120/576	06/12	
1127/-----	24-HOUR CHANGE OF PRESSURE		120/576	1200	
----/1708	INDIAN OCEAN ANALYSIS		120/576	1200	
----/1722	SIG WX FL100-250		120/576	0600	
1142/1802	H+24 SURFACE PROGNOSIS		120/576	06/12	
1210/1820	FL100 UPPER AIR ANALYSIS		120/576	00/12	
1229/1839	FL180 UPPER AIR ANALYSIS		120/576	00/12	
1248/1858	FL300 UPPER AIR ANALYSIS		120/576	00/12	
1307/1917	FL340 UPPER AIR ANALYSIS		120/576	00/12	
1326/1936	FL390 UPPER AIR ANALYSIS		120/576	00/12	
2055/-----	FL180 PRONOSTIC		120/576	0000	
2114/-----	FL300 PRONOSTIC		120/576	0000	
2133/-----	FL340 PRONOSTIC		120/576	0000	
2152/-----	FL390 PRONOSTIC		120/576	0000	
1345/-----	INDIAN OCEAN ANALYSIS		120/576	0600	
1430/-----	LOW LEVEL CONVERGENCE ZONE		120/576	1200	
1455/-----	24-HOUR CHANGE OF PRESSURE		120/576	1200	
----/2350	SIGWX FL100-250		120/576	1200	

NOTE: CHANGES TO THE SCHEDULE WILL BE TRANSMITTED AT 0830 IN PLACE OF THE NORMAL TEST CHART.

(INFORMATION DATED 1 VIII 2001) <http://www.meteo.go.ke/comm/faxschedule.txt>
 Update 03/2002 - Reported as having a RPM/IOC of 180/576 vs. 120/576

CAPE NAVAL, SOUTH AFRICA

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER	
ZSJ	4014 kHz	16Z-06Z (when available)	F3C	10 KW	
ZSJ	7508 kHz	CONTINUOUS	F3C	10 KW	
ZSJ	13538 kHz	CONTINUOUS	F3C	10 KW	
ZSJ	18238 kHz	06Z-16Z (when available)	F3C	10 KW	
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0430	SCHEDULE		120/576		
0500	SURFACE ANALYSIS(SHIPPING)		120/576	0000	ASXX
0630	UPPER AIR PROG		120/576	1200	FUXX
0730	SURFACE PROG		120/576	1200	FSXX
0800	ANTARTIC ICE LIMITS (OCT-MAR)		120/576		AIAA
0915	RTTY WEATHER BULLETINS FOR COASTAL WATERS AND HIGHSEAS		RTTY (170 Hz shift, 75 Baud)		
1030	SURFACE ANALYSIS(SHIPPING)		120/576	0600	ASXX
1100	SURFACE PROG		120/576	0000	FSXX
1530	SURFACE ANALYSIS(SHIPPING)		120/576	1200	ASXX
1700	RTTY WEATHER BULLETINS FOR COASTAL WATERS AND HIGHSEAS		RTTY (170 Hz shift, 75 baud)		
2230	SURFACE ANALYSIS(SHIPPING)		120/576	1800	ASXX
MAP AREAS:					
ASXX	1:20,000 Lambert	00S20W	00S70E	60S50W	60S90E
FUXX	1:20,000 Mercator	05S15W	05S60E	60S15W	60S60E
FSXX	1:20,000 Mercator	05S15W	05S60E	60S15W	60S60E
AIAA	30E to 30W Antarctic coast to edge of ice pack except NIC West				

(INFORMATION DATED May 2005) <http://www.weathersa.co.za/Marine/FrequencyShipFCBroadcast.jsp>

ASIA

BEIJING (PEKING), CHINA

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER	
BAF6	5526.9 kHz			F3C	6-8 KW
BAF36	8121.9 kHz			F3C	6-8 KW
BAF4	10116.9 kHz			F3C	10 KW
BAF8	14366.9 kHz			F3C	15 KW
BAF9	16025.9 kHz			F3C	?? KW
BAF33	18236.9 kHz			F3C	6-8 KW
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0008	24HR/36HR/48HR PRECIPITATION PROG (1 JUN-30 SEP)			120/576	1200 E
0132	36HR/48HR SURFACE PROG			120/576	1200 A1
0154	TYPHOON WARNING (IN ENGLISH & CHINESE)(1)			120/576	0000
0216	36HR MINIMUM TEMP PROG(1 OCT-30 APR) 48HR MAXIMUM TEMP PROG(1 MAY-30 SEP)			120/576	E
0238	24HR/48HR PRECIPITATION PROG (1 MAY-30 SEP) 60HR MINIMUM TEMP PROG (1 OCT-30 APR)			120/576	0000 E
0300	SATELLITE PICTURE ANALYSIS (1 MAY-30 SEP)			120/576	E
0406	500MB PLOTTED DATA			120/576	0000 E
0428	48HR SURFACE PROG			120/576	1800 F
0450	SURFACE ANAL			120/576	0000 H
0724	SATELLITE PICTURE ANALYSIS (1 MAY-30 SEP)			120/576	
0746	TYPHOON WARNING (IN ENGLISH & CHINESE)(1)			120/576	0600
0830	SURFACE PRESSURE ANALYSIS			120/576	0000 C
0852	24HR PRECIPITATION PROG			120/576	J
1126	TYPHOON TRACK PROG (2)			120/576	0000 D
1148	TEST CHART (4)			120/576	
1158	PROGRAM AMENDMENTS (4)			120/576	
1340	TYPHOON WARNING (IN ENGLISH AND CHINESE)(1)			120/576	1200
1904	500MB PLOTTED DATA			120/576	1200 E
1926	SURFACE PRESSURE ANALYSIS			120/576	1200 G
1948	TYPHOON WARNING (IN ENGLISH AND CHINESE)(1)			120/576	1800
2134	24 HR SURFACE ANALYSIS			120/576	1200 A1
2218	36HR/48HR 500 MB VORICITY ANALYSIS			120/576	1200 I
2240	TYPHOON TRACK PROG (2)			120/576	1200 D

NOTES:
 (1) IN CASE OF TYPHOON
 (4) ON MONDAYS

MAP AREAS:	A1 -	1:30,000,000	NORTHERN HEMISPHERE		
	C -	1:23,000,000	70S 040E, 70S 130W, 40N 040E, 40N	130W	
	D -	1:10,000,000	50N 105E, 50N 160E, 45N 105E, 45N	160E	
	E -	1:20,000,000	10N 085E, 10N 135E, 45N 066E, 45N	150E	
	F -	1:20,000,000	05S 033E, 04S 130E, 43N 041E, 20N	160E	
	G -	1:10,000,000	06N 085E, 03N 142E, 47N 063E, 41N	168E	
	H -	1:10,000,000	04S 070E, 02S 145E, 42N 023E, 48N	174E	
	I -	1:10,000,000	15N 075E, 15N 125E, 40N 040E, 45N	150E	
	J -	1:03,000,000	43N 108E, 43N 120E, 33N 108E, 33N	120E	

(INFORMATION DATED 11/1997, update 2005 – service probably ceased in 2002)

BEIJING (PEKING), CHINA

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER	
3SD	8461.9 kHz			F3C	10 KW
3SD	12831.9 kHz			F3C	10 KW
3SD	16903.9 kHz			F3C	30 KW
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0755/1130	Wave Analysis, 24h forecast 10 Day SST 10th, 20th and 31st (or last day of the month) 10 day ice forecast on 9th, 19th and 29th (or the last day of the month)			120/576	

(Date of Information Unknown)

SHANGHAI, CHINA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
BDF	3241 kHz		F3C	
	5100 kHz		F3C	
	7420 kHz		F3C	
	11420 kHz		F3C	
	18940 kHz		F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0010	SURFACE PROG	120/576		B
0130	SURFACE ANALYSIS	120/576		A
1810	SURFACE PROG	120/576		B
2030	SURFACE ANALYSIS	120/576		A

MAP AREAS: A - 60N 90E, 50N 180, 10N 100E, 05N 160E
B - YELLOW SEA, EAST CHINA SEA

(INFORMATION DATED 12/1992, update 2005 – service probably ceased in 2003)

NEW DELHI, INDIA

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
ATP57	7404.9 kHz	1430-0230	B9W	10 KW
ATP65	14842.0 kHz	0230-1430	B9W	10 KW
TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0011/1211	SURFACE ANALYSIS	120/576	18/06	A
0030/1230	24HR 250MB WIND & TEMP PROG	120/576	12/00	A
0050/1248	24HR 500MB WIND & TEMP PROG	120/576	12/00	H
0110/1306	24HR 850MB WIND & TEMP PROG	120/576	12/00	H
0130/1324	12HR SIGNIFICANT WEATHER PROG (4 PANEL)	120/576	18/06	B
0150/-----	96HR 500MB PROG (ECMWF)	120/576	1200	A
-----/1342	24HR 300MB WIND & TEMP PROG	120/576	0000	H
0210/1400	24HR 400MB WIND & TEMP PROG	120/576	12/00	H
0238/-----	24HR 300MB WIND & TEMP PROG	120/576	12/00	H
-----/1430	24HR 200MB WIND & TEMP PROG	120/576	0000	H
0300/-----	24HR 700MB WIND & TEMP PROG	120/576	1200	H
-----/1448	24HR 150MB WIND & TEMP PROG	120/576	0000	H
0320/-----	24HR 200MB WIND & TEMP PROG	120/576	1200	H
-----/1506	24HR 700MB WIND & TEMP PROG	120/576	0000	H
0340/-----	24HR 150MB WIND & TEMP PROG	120/576	1200	H
0400/-----	48HR 200MB WIND PROG (ECMWF)	120/576	1200	A
0420/-----	72HR 500MB PROG (ECMWF)	120/576	1200	A
0440/-----	7 DAY MEAN SST ANALYSIS	120/576		F
0600/-----	INSAT IR SATELLITE IMAGE	120/576	0000	F
0622/1810	TEST CHART	120/576		
0634/1820	SURFACE ANALYSIS	120/576		
-----/1840	500MB RELATIVE VORTICITY ANAL	120/576	1200	E
0654/1910	850MB ANALYSIS	120/576	00/12	A
0714/1928	700MB ANALYSIS	120/576	00/12	A
0734/1946	500MB ANALYSIS	120/576	00/12	A
0753/2004	300MB ANALYSIS	120/576	00/12	A
0812/2022	24HR SURFACE PROG	120/576	00/12	A
0834/2040	12HR SIGNIFICANT WEATHER PROG (4 PANEL)	120/576	00/12	B
0856/2100	200MB ANALYSIS	120/576	00/12	A
0916/2118	850-500MB THICKNESS ANALYSIS	120/576	00/12	A
0936/-----	24HR 500MB PROG	120/576	0000	A
-----/2136	500MB RELATIVE VORTICITY ANALYSIS	120/576	1200	D
1005/2205	SIGNIFICANT WEATHER RECEIVED FROM TOKYO	120/576		

NEW DELHI, INDIA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-----/2223	24HR 500MB PROG	120/576	1200	
1025/2241	24HR 300MB PROG	120/576	00/12	A
1055/2259	24HR 250MB PROG	120/576	00/12	A
1115/2317	24HR 200MB PROG	120/576	00/12	A
1135/2335	24HR TROPOPAUSE/MAX WIND PROG	120/576	00/12	A
1153/2353	24HR 100MB PROG	120/576	00/12	A
MAP AREAS:	A - 1:20,000,000 B - 1:20,000,000 D - 1:20,000,000 E - 1:20,000,000 F - 1:20,000,000 H - 1:20,000,000	45N - 25S, 30E - 125E EQ - 40N, 30E - 125E 5N - 42.5N, 40E - 120E EQ - 60N, 25E - 120E EQ - 25N, 55E - 100E 15S - 67.5N, 000E - 180E		

(INFORMATION DATED 1999/2003) Frequencies listed may be slightly incorrect

TOKYO, JAPAN

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
JMH	3622.5 kHz	CONTINUOUS	F3C	5 KW
JMH2	7305 kHz	CONTINUOUS	F3C	5 KW
JMH4	13597 kHz	CONTINUOUS	F3C	5 KW
TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	RETRANSMISSION OF 2200/0840	120/576		
0020/-----	96HR SURFACE PRESSURE, PRECIP PROGS	120/576	1200	C
0040/-----	120HR SURFACE PRESSURE, PRECIP PROGS	120/576	1200	C
-----/1220	12/24/48/72HR OCEAN WAVE PROG	120/576	0000	
-----/1240	24 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG	120/576	0000	
	24HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG			
-----/1251	36 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG	120/576	0000	
	36HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG			
0103/1303	TEST CHART	120/576		
0110/1310	METEOROLOGICAL SATELLITE PICTURE (MSAT)	120/576	00/12	C'
0130/1330	RETRANSMISSION OF 1019/0730	120/576		
0150/1350	TROPICAL CYCLONE FORECAST(1)	120/576	00/12	C'
0210/-----	SEA SURFACE CURRENT, WATER TEMPERATURE AT 100M DEPTH (2)	120/576		
0229/-----	RADIO PREDICTION (3)	120/576		
-----/1420	RETRANSMISSION OF 0210 (2)			
0240/1440	SURFACE ANALYSIS	120/576	00/12	C'
0300/-----	SEA SURFACE WATER TEMPERATURE (2)	120/576		
0320/1520	THE FIRST RETRANSMISSION OF 0240/1440	120/576		
0340/-----	BROADCAST SCHEDULE, MANUAL AMENDMENTS	120/576		
0400/1540	RETRANSMISSION OF 0150/1350 (1)	120/576		
-----/1620	RETRANSMISSION OF 0300 (2)	120/576		
0421/-----	OCEAN WAVE ANALYSIS (NORTH PACIFIC)	120/576	0000	C''
0440/-----	COASTAL WAVE ANALYSIS	120/576	0000	X
0459/1640	500HPA HEIGHT, TEMPERATURE	120/576	00/12	C
0518/1700	850HPA HEIGHT, TEMPERATURE, DEW POINT DEPRESSION	120/576	00/12	C
-----/1719	COASTAL WAVE ANALYSIS (1)	120/576	1200	X
0537/1739	24HR 500HPA HEIGHT, VORTICITY PROGNOSIS	120/576	00/12	
	24 HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS			
0548/-----	24HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG	120/576	0000	C'
0610/1750	THE SECOND RETRANSMISSION OF 0240/1440	120/576		
0630/-----	48/72 HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576	00/00	

TOKYO, JAPAN

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID	MAP
-----/1810	36HR 500HPA HEIGHT, VORTICITY PROGNOSIS 36HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576	1200	
-----/1821	24 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG 24HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG	120/576	1200	
-----/1832	36 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG 36HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG	120/576	1200	
-----/1850	12/24/48/72HR OCEAN WAVE PROG	120/576	1200	
0651/-----	24HR WAVE PROG (NORTH PACIFIC)	120/576	0000	C"
0710/1910	METEOROLOGICAL SATELLITE PICTURE (GOES-9)	120/576	06/18	C'
0730/-----	24HR COASTAL WAVE PROG	120/576	0000	X
-----/1930	24HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG	120/576	1200	C'
0750/1950	TROPICAL CYCLONE FORECAST (1)	120/576	06/18	C'
-----/2010	24HR COASTAL WAVE PROG (1)	120/576	1200	X
0809/-----	36HR 500HPA HEIGHT, VORTICITY PROGNOSIS	120/576	0000	
0820/-----	36HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576	0000	C'
0840/2040	48HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG SURFACE ANALYSIS	120/576	06/18	C'
-----/2100	48HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG	120/576	1200	C
0900/-----	RETRANSMISSION OF 0750 (1)	120/576		
0920/2120	THE FIRST RETRANSMISSION OF 0840/2040	120/576		
0940/2140	RETRANSMISSION OF 0630/1950	120/576		
1000/-----	RETRANSMISSION OF 0820	120/576		
-----/2200	48/72HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576		
1019/-----	SEA ICE CONDITION ANAL(4), 48HR & 168 HR PROGS(5)	120/576	12/12	L/L'
-----/2220	RETRANSMISSION OF 1719	120/576		
1040/2240	RETRANSMISSION OF 0548/2040	120/576		
1100/2300	RETRANSMISSION OF 0421/1930	120/576		
1119/2320	RETRANSMISSION OF 0440/2010	120/576		
1140/2340	RETRANSMISSION OF 0651/2100	120/576		

- NOTES:(1) IN CASE OF TROPICAL CYCLONE
 (2) EVERY TUESDAY AND FRIDAY
 (3) ON THE 20TH AND 21ST.
 (4) EVERY TUESDAY AND FRIDAY (SEASONAL) RETRANSMISSION: AT 0130 ON THE NEXT DAY
 (5) EVERY WEDNESDAY AND SATURDAY (SEASONAL). RETRANSMISSION: AT 0130 ON THE NEXT DAY

MAP AREAS: C - 1:20,000,000 27N 062E, 51N 152W, 05S 106E, 02N 160E
 C' - 1:20,000,000 39N 066E, 39N 146W, 01S 113E, 01S 167E
 C" - 1:20,000,000 38N 067E, 39N 148W, 01S 112E, 01S 167E
 L - 1:10,000,000 SEA OF OKHOTSK, NORTHERN SEA OF JAPAN, BO HAI, AND ADJACENT WATERS OF THE NORTH PACIFIC.
 L' - 1:05,000,000 49N 140E, 49N 151E, 41N 140E, 40N 149E
 X - 1: 6,000,000 46N 107E, 43N 160E, 18N 118E, 17N 147E

(INFORMATION DATED 28 JUN 2005) <http://www.kishou.go.jp/177jmh/JMH-ENG.pdf>

PEVEK, CHUKOTKA PENINSULA

CALL SIGNS	FREQUENCIES		EMISSION	POWER	
	148 kHz		F3C		
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0530-0730	ICE		90/576		
1130-1330	ICE		90/576		
1430-1630	ICE		90/576		

(INFORMATION DATED 11/97)

TAIPEI, REPUBLIC OF CHINA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
BMF	4616 kHz		F3C	10 KW
	5250 kHz		F3C	10 KW
	8140 kHz		F3C	10 KW
	13900 kHz		F3C	10 KW
	18560 kHz		F3C	10 KW
TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0040/-----	BROADCAST SCHEDULE	120/576		
0110/1310	TYphoon Warnings (English & Chinese)	120/576	00/12	
0130/1330	GMS Satellite Image	120/576	00/12	
0250/1450	Fishery Weather Forecast (in Chinese)	120/576	00/12	
0330/1530	Surface Analysis with Potted Data	120/576	00/12	
0350/-----	24HR Surface Prog	120/576	0000	
0410/1610	Typhoon Warning (English & Chinese)	120/576	03/15	
0430/1630	850HPA Analysis with Potted Data	120/576	00/12	
0440/1640	700HPA Analysis with Potted Data	120/576	00/12	
0450/1650	500HPA Analysis with Potted Data	120/576	00/12	
0500/1700	300HPA Analysis with Potted Data	120/756	00/12	
0510/1710	RFS Surface Pressure Analy/RFS 500HPA Height Analysis	120/576	00/12	
0520/1720	RFS 12HR Surface Prog/RFS 12HR 500HPA PROG	120/576	00/12	
0530/1730	RFS 24HR Surface Prog/RFS 24HR 500HPA PROG	120/576	00/12	
0540/1740	RFS 36HR Surface Prog/RFS 24HR 500HPA PROG	120/576	12/00	
0550/1750	RFS 48HR Surface Prog/RFS 48HR 500HPA PROG	120/576	00/12	
0600/1800	RFS 72HR Surface Prog/RFS 72HR 500HPA PROG	120/576	00/12	
0620/1820	GFS 850HPA Equatorial Belt Wind Analysis	120/576	00/12	
0630/1830	GFS 200HPA Equatorial Belt Wind Analysis	120/576	00/12	
0640/1840	GFS 24HR 850HPA Equatorial Belt Wind PROG	120/576	00/12	
0650/1850	GFS 24HR 200HPA Equatorial Belt Wind PROG	120/576	00/12	
0710/1910	Typhoon Warnings (English & Chinese)	120/576	06/18	
0730/1930	GMS Satellite Image	120/576	06/18	
0745/1945	GFS 48HR 850HPA Equatorial Belt Wind PROG	120/576	00/12	
0755/1955	GFS 48HR 200HPA Equatorial Belt Wind PROG	120/576	00/12	
0805/-----	Wave Analysis	120/576	0000	
0820/-----	36HR Wave PROG	120/576	0000	
-----/2005	GFS 72HR 850HPA Equatorial Belt Wind PROG	120/576	1200	
-----/2015	GFS 72HR 200HPA Equatorial Belt Wind PROG	120/576	1200	
-----/2025	GFS 96HR Surface PROG	120/576	1200	
-----/2035	GFS 72HR Surface PROG	120/576	1200	
0850/2050	Fishery Weather Forecast (in Chinese)	120/576	06/18	
0930/2130	Surface Analysis with Potted Data	120/576	06/18	
1010/-----	Typhoon Warnings (English & Chinese)	120/576	0900	
-----/2150	GFS 120HR Surface PROG	120/576	1200	
-----/2200	GFS 120HR 500HPA PROG	120/576	1200	
-----/2210	Typhoon Warnings (English & Chinese)	120/576	2100	

MAP AREA: 48N 060E, 48N 172W, EQ 099E, EQ 154E

(SCHEDULE EFFECTIVE APR 01, 2002)

(INFORMATION DATED 10/2002) <http://marine.cwb.gov.tw/CWBMMC/BMF-E.html>

SEOUL, REPUBLIC OF KOREA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
HLL2	5385 kHz	CONTINUOUS	F3C	3 KW
HLL2	5857.5 kHz	CONTINUOUS	F3C	3 KW
HLL2	7433.5 kHz	CONTINUOUS	F3C	3 KW
HLL2	9165 kHz	CONTINUOUS	F3C	3 KW
HLL2	13570 kHz	CONTINUOUS	F3C	3 KW

SEOUL, REPUBLIC OF KOREA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	LOCAL WEATHER ADVISORY/WARNING REPORT (KOREAN)	120/576		
0020/1220	LOCAL WEATHER ADVISORY/WARNING REPORT (KOREAN)	120/576	00/12	
0032/-----	LIGHTHOUSE WEATHER OBSERVATION REPORT (KOREAN)	120/576	0000	
0046/1246	WEATHER OBSERVATION REPORT FOR FISHERY (KOREAN)	120/576	00/12	
0120/-----	MANUAL AMENDMENTS	120/576		
0140/1340	SURFACE ANALYSIS	120/576	00/12	
0200/1400	TYPHOON WARNING AND FORECAST (1)(KOREAN)	120/576	00/12	
0300/-----	KOREAN PENINSULA MONTHLY WEATHER FORECAST (2)(KOREAN)	120/576		
-----/1500	LOCAL WEATHER ADVISORY/WARNING REPORT (KOREAN)	120/576		
0320/1520	SEA-SHORE WEATHER OBSERVATION REPORT (KOREAN)	120/576	03/15	
0332/-----	LIGHTHOUSE WEATHER OBSERVATION REPORT (KOREAN)	120/576	0300	
0346/1546	WEATHER OBSERVATION REPORT FOR FISHERY (KOREAN)	120/576	03/15	
0415/-----	KOREAN PENINSULA WEEKLY WEATHER FORECAST (KOREAN)	120/576		
0440/1640	SURFACE ANALYSIS	120/576	03/15	
0455/1655	850MB ANALYSIS	120/576	00/12	
0507/1707	700MB ANALYSIS	120/576	00/12	
0519/1719	500MB ANALYSIS	120/576	00/12	
0600/1800	LOCAL WEATHER ADVISORY/WARNING REPORT (KOREAN)	120/576		
0620/1820	SEA-SHORE WEATHER OBSERVATION REPORT (KOREAN)	120/576	0618	
0632/-----	LIGHTHOUSE WEATHER OBSERVATION REPORT (KOREAN)	120/576	0600	
0646/1846	WEATHER OBSERVATION REPORT FOR FISHERY (KOREAN)	120/576	06/18	
0700/1900	SATELLITE IMAGERY	120/576	0530/1730	
0712/-----	SST OBSERVATION CHART OF NEAR KOREAN PENINSULA AREA	120/576		
0740/1940	SURFACE ANALYSIS	120/576	06/18	
0800/2000	TYPHOON WARNING AND 12HR/24HR FORECASTS (1) (KOREAN)	120/576	06/18	
0821/2021	12HR SEA WAVE HT & WIND FORECAST OF NEAR KOREAN PENINSULA	120/576	00/12	
0834/2034	24HR SEA WAVE HT & WIND FORECAST OF NEAR KOREAN PENINSULA	120/576	00/12	
0847/2047	36HR SEA WAVE HT & WIND FORECAST OF NEAR KOREAN PENINSULA	120/576	00/12	
0900/2100	SEA WEATHER FORECAST OVER NEAR KOREAN PENINSULA (KOREAN)	120/576	0830/2030	
0920/2120	SEA-SHORE WEATHER OBSERVATION REPORT (KOREAN)	120/576	09/21	
0932/2132	LIGHTHOUSE WEATHER OBSERVATION REPORT (KOREAN)	120/576	09/21	
0946/2146	WEATHER OBSERVATION REPORT FOR FISHERY (KOREAN)	120/576	09/12	
1012/2212	WEATHER FORECAST FOR SHIP ROUTE (KOREAN)	120/576	0830/2030	
-----/2227	LIGHTHOUSE WEATHER OBSERVATION REPORT (3) (KOREAN)	120/576	2200	
1040/2240	SURFACE ANALYSIS	120/576	09/21	

NOTES:

1. IN CASE OF TYPHOON.
2. BROADCAST AT THE END OF THE MONTH.
3. NOVEMBER TO APRIL.
4. ALTERNATING BLACK AND WHITE SIGNALS WITH FREQUENCY OF 300 Hz WILL BE TRANSMITTED FOR 10 SECONDS PRIOR TO THE PHASING SIGNAL.
5. PHASING SIGNALS WILL BE TRANSMITTED FOR 30 SECONDS PRIOR TO TRANSMISSION OF EACH CHART.
6. STOP SIGNALS WILL BE TRANSMITTED FOR 15 SECONDS AFTER EACH TRANSMISSION.

(INFORMATION DATED 02/1999)

BANGKOK, THAILAND

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
HSW64	7396.8 kHz		F3C	3 KW
HSW61	17520 kHz		F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0100/0700	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	00/06	A
0120/.....	SURFACE PROG	120/576	1200	A
0140/.....	SURFACE ANALYSIS	120/576	1800	A
0300/0720	24 HR SURFACE PROG	120/576	12/12	A
0320/0740	48 HR SURFACE PROG	120/576	12/12	A
0340/0800	72 HR SURFACE PROG	120/576	12/12	A
...../0820	24 HR 850 MB WIND/TEMP PROG	120/576	1200	A

BANGKOK, THAILAND

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0400/1000	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	03/09	A
0420/.....	24 HR 850 MB WIND/TEMP PROG	120/576	1200	A
0500/1020	SURFACE ANALYSIS	120/576	00/06	A
0500/.....	TEST CHART	120/576		
0520/.....	850 MB ANALYSIS	120/576	0000	A
0540/.....	700 MB ANALYSIS	120/576	0000	A
0600/.....	500 MB ANALYSIS	120/576	0000	A
...../1300	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	1200	A
...../1700	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	1700	A
...../1720	SURFACE ANALYSIS	120/576	1200	
...../2300	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	1700	A
...../2320	SURFACE ANALYSIS	120/576	1800	A

MAP AREA: A - 1:20,000,000 50N 045E, 50N 160E, 30S 045E, 30S 160E

(INFORMATION DATED 11/97)

TASHKENT 1, UZBEKISTAN

CALL SIGNS	CONTENTS OF TRANSMISSION		EMISSION		POWER
RBV70	3690 kHz		1300-0130		F3C
RPJ78	4365 kHz		CONTINUOUS		F3C
RBV78	5890 kHz		CONTINUOUS		F3C
RBX72	7570 kHz		0130-1300		F3C
RCH72	9340 kHz		CONTINUOUS		F3C
RBV76	14982.5 kHz		CONTINUOUS		F3C
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
-----/1215	NEPHANALYSIS		90/576	-----	A*
0110/-----	RADAR DATA		90/576	0000	E
0130/1325	18HR SIGNIFICANT WEATHER PROG		60/576	06/18	D
0155/1355	SURFACE ANALYSIS		60/576	00/12	B
0255/1455	SURFACE ANALYSIS		60/576	00/12	A
0345/1540	700MB ANALYSIS		90/576	00/12	A
-----/1615	400MB ANALYSIS		90/576	1200	A
0420/-----	NEPHANALYSIS		90/576	-----	A
0450/-----	300MB ANALYSIS		120/576	0000	A
-----/1655	SURFACE ANALYSIS		60/576	1500	B
0515/-----	850MB ANALYSIS		90/576	0000	A
-----/1745	500/1000MB ANALYSIS		90/576	1200	A
0625/1850	36HR 500MB PROG		120/288	12/00	C
0633/-----	36HR 850MB/700MB/500MB VERTICAL MOTION PROGS		90/576	1200	C
0650/-----	RADAR DATA		90/576	0600	E
-----/1905	PRECIPITATION AND MAX TEMPS		60/576	1500	K
0720/-----	400MB ANALYSIS		90/576	0000	A
0755/1930	SURFACE ANALYSIS		60/576	06/18	B
-----/2020	SURFACE ANALYSIS		60/576	1800	A
0845/-----	50MB ANALYSIS		90/576	0600	A
-----/2105	36HR 850MB/700MB/500MB VERTICAL MOTION PROGS		90/576	0000	C
0930/2122	TROPOPAUSE ANALYSIS		90/576	00/12	A
-----/2200	RADAR DATA		90/576	2100	E
1005/-----	500/1000MB ANALYSIS		90/576	0000	A
1055/2255	SURFACE ANALYSIS		60/576	09/21	B
-----/2345	24HR 850MB/700MB/500MB VERTICAL MOTION PROGS		90/576	1200	C

NOTE: DESCRIPTIONS OF MAP AREAS ARE LISTED IN PROGRAM 2..

(INFORMATION DATED 09/1990, update 2005 – service probably ceased in 2003)

TASHKENT 2, UZBEKISTAN

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER	
RBX70	3280 kHz	CONTINUOUS	F3C		
RBX71	5285 kHz	CONTINUOUS	F3C		
RIJ75	8083 kHz	1400-0200	F3C		
RCH73	9150 kHz	CONTINUOUS	F3C		
ROM5	13947 kHz	0200-1400	F3C		
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0030/-----	BROADCAST SCHEDULE		90/576		
0050/1250	RADAR DATA		90/576	00/12	E
0130/-----	18HR SIGNIFICANT WEATHER PROG		60/576	06/18	H
-----/1330	PREBARIC CHART		60/576	1800	H
0258/-----	48HR 500MB PROG		90/576	0000	C
0315/1515	300MB ANALYSIS		90/576	00/12	A
0350/1550	RADAR DATA		90/576	03/15	E
0410/1605	500MB ANALYSIS		90/576	00/12	A
-----/1640	850MB ANALYSIS		90/576	1200	A
0500/-----	SURFACE ANALYSIS		60/576	0300	B
0550/1720	200MB ANALYSIS		90/576	00/12	A
-----/1755	100MB ANALYSIS		90/576	1200	A
0625/-----	PRECIPITATION/TEMPERATURE EXTREMES		90/576	1200	A
0640/-----	400MB ANALYSIS		90/576	0000	A
-----/1905	RADAR DATA		90/576	1800	E
0715/-----	100MB ANALYSIS		90/576	0000	A
0750/1930	15HR 300MB/SIGNIFICANT WEATHER PROG		90/576	15/03	H
-----/2015	MAX WIND ANALYSIS		90/576	1200	D*
0830/-----	500MB ANALYSIS		60/576	0600	A
0915/2105	MAX WIND ANALYSIS		90/576	00/18	A/D*
-----/2122	700MB ANALYSIS		90/576	1800	D*
-----/2139	500MB ANALYSIS		90/576	1800	D*
0950/-----	RADAR DATA		90/576	0900	E
-----/2155	400MB ANALYSIS		90/576	1800	D*
-----/2212	300MB ANALYSIS		90/576	1800	D*
1140/2320	12HR 300MB/SIGNIFICANT WEATHER PROGS		90/576	18/00	H
MAP AREAS: A - 1:15,000,000 45N 037W, 43N 125E, 16N 011E, 15N 078E A* - 1:15,000,000 57N 005W, 27N 123E, 14N 030E, 02N 088E B - 1:05,000,000 45N 030E, 49N 081E, 26N 040E, 28N 077E C - 1:15,000,000 53N 006W, 48N 095E, 25N 026E, 22N 072E D - 1:15,000,000 56N 021W, 58N 108E, 30N 016E, 31N 072E D* - 1:15,000,000 70N 008W, 47N 118E, 34N 029E, 24N 082E H - 1:15,000,000 56N 021E, 58N 108E, 30N 016E, 31N 072E K - 1:07,500,000 47N 038E, 49N 079E, 30N 046E, 31N 174E					

(INFORMATION DATED 07/1997, update 2005 – service probably ceased in 2003)

KYODO NEWS AGENCY, JAPAN/SINGAPORE

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
JJC	4316 kHz	CONTINUOUS	F3C	5 KW
JJC	8467.5 kHz	CONTINUOUS	F3C	10 KW
JJC	12745.5 kHz	CONTINUOUS	F3C	15 KW
JJC	16971 kHz	CONTINUOUS	F3C	15 KW
JJC	17069.6 kHz	CONTINUOUS	F3C	15 KW
JJC	22542 kHz	CONTINUOUS	F3C	15 KW
9VF/252	16035 kHz	0740-1010, 1415-1815	F3C	10 KW
9VF/252	17430 kHz	0740-1010, 1415-1815	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0145	Sports Ed 2(R), (Seasonal during Sumo or High School baseball series)	60/576		
0200	MON: NX for 1 week	120/576		
0200	TUE-SUN: NX (R), Epidemic Information(R)(SUN only), Ocean Information(N)(4th, 14th, and 24th, 3rd, 13th, 23rd if a MON)	120/576		
0245	Ocean Information(n)(4th, 14th, and 24th)	60/576		
0430	Morning Ed(R), Sports Ed 1(R), NX(R)	60/576		
0430	WX Chart	120/576	0000	
0430	Ocean Information(n)(4th, 14th, and 24th)	120/576		
0540	TUE&FRI: Satellite Fishery Information	60/576		
0540	SAT&SUN: Ocean Graphic Information	60/576		
0540	SUN&MON: Sea Surface Current Prog	60/576		
0610	TUE-SAT: English Ed (R)	120/576		
0635	MON-SAT: FAX DAYORI 4(N), (except 2nd & 4th MON and every WED and FRI)	60/576		
0650	SUN: WX Chart, Fishing Information (3 times per month)	60/576	0300	
0650	MON-SAT: WX Chart	60/576	0300	
0705	Background Stories(N), Life(N)(except MON)	60/576		
0745	SUN:			
	Sunday Ed(N), FAX DAYORI 1,2,3 (N)	60/576		
	Sumo match (begins 0930 SAT as well)	60/576		
0745	MON-SAT:			
	Evening Ed(N), Kaiun-Suisan News(N) (Except SAT), Epidemic Information(N)(SAT only), FAX DAYORI 1(N), Sumo match (Seasonal)(N), FAX DAYORI 2(N)(except TUE&SAT)	60/576		
0745	NATIONAL HOLIDAYS:			
	Morning Ed(R), Sports Ed 1 (R), FAX DAYORI 1(N), Sumo match (Seasonal)(N)FAX DAYORI 2(N)	60/576		
1100	NX (N), Sumo match (Seasonal)(R)	60/576		
1130	MON-FRI: English Ed (N)	60/576		
1335	Background Stories(R), Life(R)(except MON)	60/576		
1415	MON-FRI: Kaiun-Suisan News(R)	60/576		
1445	Sports Ed 2(N), (Seasonal during Sumo or High School baseball series)	60/576		
1500	Morning Ed(N), Sports Ed 1(N), NX(R)	60/576		
1645	MON: Sunday Ed(R)	60/576		
1645	TUE-SUN: Evening Ed(R)	60/576		
1810	TUE-SAT: English Ed (R)	60/576		
1930	MON: Evening Ed(R), NX(R), FAX DAYORI 2,1,3 (R)	60/576		
1930	TUE-SUN: Evening Ed(R), NX(R), FAX DAYORI 2,1,4 (no 4 on THU,SAT and TUE following 2nd & 4th MON Also no 2 on WED and SUN)(R)	60/576		
2030	DAY AFTER NATIONAL HOLIDAYS: NX(R), FAX DAYORI 2,1,4 (R)	60/576		
2215	MON and DAY AFTER NATIONAL HOLIDAYS:			
	Morning Ed(R),Sports Ed 1,2(R),NX(R),FAX DAYORI 1-3(R)(3 Mon only)	60/576		
2215	WX Chart	60/576	2100	
	TUE-SUN:			
	Morning Ed(R), Sports Ed 1,2(R), NX(R), Kaiun-Suisan News(R) (Except SUN). Epidemic Info (SUN only)	60/576		
	FAX DAYORI 1,2 (R)(no 2 on SUN and WED)	60/576		
	WX Chart	60/576	2100	

NX: Navigational Warning, N: New, R: Repeat

Some of these transmissions may be encrypted

(INFORMATION DATED March 1, 1999 provided by Kyodo News April 2001)

NORTHWOOD, UNITED KINGDOM (PERSIAN GULF)

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
GYA	3289.5 kHz	ALTERNATE	F3C	10 KW
GYA	6834 kHz	CONTINUOUS	F3C	10 KW
GYA	14436 kHz	ALTERNATE	F3C	10 KW
GYA	18261 kHz	CONTINUOUS	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0106/1306	SCHEDULE	120/576		
0118/1318	QSL REPORT			
0306/1506	SURFACE ANALYSIS	120/576	00/12	
0354/1554	STREAMLINE ANALYSIS	120/576	00/12	
0406/1606	SURFACE ANALYSIS	120/576	00/12	
0418/1618	700 hPa WBPT/PPTN +24	120/576	00/12	
0430/1630	AIR TEMP/DEW POINT +24	120/576	00/12	
0442/1642	SURFACE PROG T+24	120/576	00/12	
0454/1654	GULF TAFS	120/576	03/15	
0506/1706	SURFACE ANALYSIS	120/576	00/12	
0518/1718	SURFACE PROG T+24	120/576	00/12	
0530/1730	SURFACE PROG T+48	120/576	00/12	
0542/1742	GULF TAFS	120/576	06/18	
0606/1806	SURFACE ANALYSIS	120/576	00/12	
0618/1818	SURFACE PROG T+24	120/576	00/12	
0654/1854	GULF TAFS	120/576	06/18	
0706/1906	SPARE TAFS	120/576		
0718/1918	SIGNIFICANT WINDS PROG T+24	120/576	00/12	
0730/1930	SURFACE PROG T+48	120/576	00/12	
0742/1942	SURFACE PROG T+72	120/576	00/12	
0754/1954	SURFACE PROG T+96	120/576	00/12	
0806/2006	SURFACE PROG T+120	120/576	00/12	
0818/2018	THICKNESS/GEOPONENTIAL HEIGHT ANALYSIS	120/576	00/12	
0830/2030	SURFACE SIGNIFINT WINDS T+48	120/576	00/12	
0842/2042	SURFACE SIGNIFINT WINDS T+72	120/576	00/12	
0854/2054	SURFACE SIGNIFINT WINDS T+96	120/576	00/12	
0918/2118	THICKNESS/GEOPONENTIAL HEIGHT ANALYSIS	120/576	00/12	
0930/2130	THICKNESS/GEOPONENTIAL HEIGHT T+24	120/576	00/12	
0942/2142	850 hPa WINDS T+24	120/576	00/12	
0954/2154	700 hPa WINDS T+24	120/576	00/12	
1006/2206	SEA SURFACE TEMP	120/576	0000	
1042/2242	700 hPa WBPT/PPTN T+24	120/576	06/18	
1054/2254	AIR TEMP/DEW POINT +24	120/576	06/18	
1130/2330	SEA AND SWELL PROGNOSIS T+24	120/576	06/18	

ALL MAPS 40°30'N.15°30'E 40°30'N.80°E 03°N.15°30'E 3°N.80°E

WBPT WET BULB POTENTIAL TEMPERATURE

PPTN PRECIPITATION

INFORMATION DATED 03 JUNE 2005

SOUTH
AMERICA

RIO DE JANEIRO, BRAZIL

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER	
PWZ-33	12665 kHz	CONTINUOUS	F3C	1 KW	
PWZ-33	16978 kHz	CONTINUOUS	F3C	1 KW	
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0745/1630	TEST CHART		120/576		
0750/1635	SURFACE ANANYSIS (Hpa)		120/576	00/12	A
0810/1655	WAVES SIG HEIGHT (m) AND DIR PROG 12Z+36HR		120/576	00/12	B
0830/1715	WIND AT 10 m (KTS) PROG 12Z+36 HR		120/576	00/12	C
0850/1735	SEA SURFACE TEMPERATURE		120/576	12/00	D
MAP AREA:	A: 1:53,000,000 20N 090W, 20N 020E, 70S 090W, 70S 020E B: 1:58,000,000 20N 090W, 20N 020E, 70S 090W, 70S 020E C: 1:58,500,000 20N 090W, 20N 020E, 70S 090W, 70S 020E D: 1:32,700,000 15N 072W, 15N 018W, 50S 072W, 50S 018E				

(INFORMATION DATED 22 SEP 2004) https://www.mar.mil.br/dhn/chm/meteo/info/apend_3ing.htm

VALPARAISO PLAYA ANCHA, CHILE

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER	
CBV	4228.0 kHz	CONTINUOUS	F3C	1 KW	
CBV	8677.0 kHz	CONTINUOUS	F3C	1 KW	
CBV	17146.4 kHz	CONTINUOUS	F3C	1 KW	
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
1115	SURFACE ANALYSIS		120/576	0600	A
1130	SATELLITE IMAGE		120/576	0900	A
1630	SURFACE ANALYSIS		120/576	1200	A
1645	SATELLITE IMAGE		120/576	1500	A
1915	SIGNIFICANT WAVE MAP (MTS)		120/576	1200	A
1930	SATELLITE IMAGE		120/576	1800	A
2200	SURFACE ANALYSIS		120/576	1800	A
2215	ICE REPORT		120/576		A
2230	12HR WINDS BARB ISOTACHS FORECAST		120/576	1200	A
2310	12HR SURFACE FORECAST		120/576		A
2325	SATELLITE IMAGE		120/576	2100	A
MAP AREA:	A: 10S-120W, 10S-050W, 80S-130W, 80S-030W				

(INFORMATION DATED Sep 10, 2003) <http://www.directemar.cl/meteo/operador/horarios.htm>

NORTH
AMERICA

HALIFAX, NOVA SCOTIA, CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
CFH	122.5 kHz 4271 kHz 6496.4 kHz 10536 kHz 13510 kHz	CONTINUOUS CONTINUOUS CONTINUOUS CONTINUOUS CONTINUOUS	F3C F3C F3C F3C F3C	10 KW 6 KW 6 KW 6 KW 6 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC TIME	VALID TIME	MAP AREA
0001/-----	LABRADOR COAST ICE CHART (SEASONAL)	120/576	LATEST	
-----/1201	3-DAY PROG	120/576	1200	G
0101/-----	SATELLITE PHOTO INFRARED	120/576	0000	
-----/1222	4-DAY PROG	120/576	1200	G
-----/1301	5-DAY PROG	120/576	1200	G
0201/1401	12/00Z SIGNIFICANT WEATHER DEPICTION	120/576	12/00	A
0301/1501	500MB ANALYSIS	120/576	00/12	B
0322/1522	SURFACE ANALYSIS	120/576	00/12	F
-----/1601	850MB ANALYSIS	120/576	1200	B
0401/1622	36HR 500MB FORECAST	120/576	12/00	H
0422/1701	24HR SURFACE PROG	120/576	00/12	A
0501/-----	850 MB FORECAST WINDS	120/576	18&00	C
0601/1801	36HR SURFACE PROG	120/576	12/00	A
-----/1822	850MB FORECAST WINDS	120/576	06&12	C
0701/1901	18/06Z SIGNIFICANT WEATHER DEPICTION	120/576	18/06	A
0801/2001	24/36HR SIGNIFICANT WAVE PROGNOSIS	120/576	0&12/12&0	A
0901/2101	SURFACE ANALYSIS	120/576	06/18	F
1001/-----	SST: NOVA SCOTIA - MON NEWFOUNDLAND - TUE/FRI	120/576	LATEST	E/D
1001/-----	OFA: NOVA SCOTIA - WED/SAT NEWFOUNDLAND - SUN/THU	120/576	LATEST	E/D
-----/2201	SST: NOVA SCOTIA - TUE/THU/FRI NEWFOUNDLAND - WED/SAT	120/576	LATEST	E/D
-----/2201	OFA: NOVA SCOTIA - SUN NEWFOUNDLAND - MON	120/576	LATEST	E/D
1022/-----	SATELLITE PHOTO INFRARED	120/576	0900	
-----/2222	NEWFOUNDLAND ICE CHART	120/576	LATEST	
1101/-----	CFH BROADCAST SCHEDULE	120/576	LATEST	
-----/2301	GULF OF ST LAWRENCE ICE CHART (SEASONAL)	120/576	LATEST	

NOTES:

This schedule of chart and text transmission is subject to short notice change according to the requirements of the Canadian Forces.

The geographic area of coverage for the ice charts varies according to season. The following are the typical areas to be broadcast: Gulf of St. Lawrence, East Newfoundland waters, Labrador Coast, Hudson Strait, Davis Strait and Baffin Bay. The Canadian Ice Service prepares all ice charts.

- MAP AREAS:
- | | |
|---------------------------------------|--|
| A. 56N 87W, 56N 24W, 34N 48W, 34N 73W | E. 50N 75W, 50N 48W, 34N 48W, 34N 75W |
| B. 76N 16W, 30N 20W, 23N 110W, 8N 69W | F. 42N 22W, 22N 60W, 34N 89W, 74N 52W |
| C. 52N 80W, 65N 15W, 30N 60W, 34N 17W | G. 52N 98W, 56N 24W, 30N 39W, 28N 78W |
| D. 60N 68W, 60N 37W, 43N 37W, 43N 68W | H. 30N 107W, 15N 67W, 34N 24W, 79N 60W |
| | I. 54N 100W, 58N 22W, 30N 39W, 28N 78W |

(INFORMATION DATED May 2005) <http://www.ccg-gcc.gc.ca/mcts-sctm/ramn/docs/aa.ae/ae5-37.htm>

IQALUIT, N.W.T., CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER	
VFF	3253.0 kHz USB	25 JUN – 30 NOV	J3C	5 KW	
VFF	7710.0 kHz USB	25 JUN – 30 NOV	J3C	5 KW	
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0500/-----	Ice Analysis Hudson Bay south, Hudson Bay north, Hudson Strait, Foxe Basin, Labrador Coast, Davis Strait, Baffin Bay.		120/576		
1000/2100	Marine Surface Analysis (Arctic)		120/576		
	Marine wind prognosis (Arctic) (experimental product)				
-----/2125	Regional Marine Wind Prognosis (on request)				
	Ice Analysis Hudson Bay south, Hudson Bay north, Hudson Strait, Foxe Basin, Labrador Coast, Davis Strait, Baffin Bay.		120/576		

NOTE: THE AREAS INCLUDED IN THE BROADCASTS VARY WITH ICE CONDITIONS AND MARINE ACTIVITY. ALL CHARTS AVAILABLE CAN BE TRANSMITTED ON REQUEST.

(INFORMATION DATED May 2005) <http://www.ccg-gcc.gc.ca/mcts-sctm/ramn/docs/aa.ae/ae2-4.htm>

RESOLUTE, N.W.T., CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER	
VFR	3253.0 kHz	25 JUN – 30 NOV	J3C	5 KW	
VFR	7710.0 kHz	25 JUN – 30 NOV	J3C	5 KW	
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0010/-----	Ice analysis Baffin Bay, Approaches to Resolute, Resolute-Byam, Eureka Sound, McClure Strait, Parry Channel and Queen Maude.		120/576		
0700/-----	Ice analysis Baffin Bay, Approaches to Resolute, Resolute-Byam, Eureka Sound, McClure Strait, Parry Channel and Queen Maude.		120/576		
1100/2330	Marine Surface Analysis (Arctic)		120/576		
	Marine wind prognosis (Arctic) (experimental product)				
	Regional Marine Wind Prognosis (on request)				

(INFORMATION DATED May 2005) <http://www.ccg-gcc.gc.ca/mcts-sctm/ramn/docs/aa.ae/ae2-4.htm>

SYDNEY - NOVA SCOTIA, CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER	
VCO	4416 kHz	1121-1741	J3C		
VCO	6915 kHz	2200-2331	J3C		
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
1121	ICE ANALYSIS GULF OF ST. LAWRENCE		120/576		
1142	ICE ANALYSIS EAST OR SOUTHEAST NEWFOUNDLAND WATERS		120/576		
1741	ICE ANALYSIS ICEBERG LIMIT		120/576		
2200	ICE ANALYSIS GULF OF ST. LAWRENCE		120/576		
2331	ICE ANALYSIS EAST OR SOUTHEAST NEWFOUNDLAND WATERS		120/576		

(INFORMATION DATED 2005) <http://www.ccg-gcc.gc.ca/mcts-sctm/ramn/docs/aa.ae/ae2-52.htm>

KODIAK, ALASKA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NOJ	2054 kHz	CONTINUOUS	F3C	7.5 KW
	4298 kHz	CONTINUOUS	F3C	7.5 KW
	8459 kHz	CONTINUOUS	F3C	7.5 KW
	12412.5 kHz	CONTINUOUS	F3C	7.5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID	MAP
0400/1600	TEST PATTERN	120/576		
0403/1603	SURFACE ANALYSIS	120/576	00/12	2
0427/1627	REBROADCAST 24HR SURFACE FCAST 2227/1027	120/576	12/00	3
0437/1637	REBROADCAST 48HR SURFACE FCAST 2237/1037	120/576	02/00	1
0447/1647	COASTAL MARINE FORECAST TABLES (ALASKA)	120/576	LATEST	
0456/1656	SEA STATE ANALYSIS/REBROADCAST	120/576	00/00	1
0506/1706	GOES IR SATELLITE IMAGE	120/576	00/12	5
0517/1717	500 MB ANALYSIS	120/576	00/12	1
0527/1727	SYMBOLS AND CONTRACTIONS/SCHEDULE	120/576		
0548/1748	REQUEST FOR COMMENTS/PRODUCT NOTICE	120/576		
0558/1758	24HR 500MB FORECAST	120/576	00/12	1
0950/2150	TEST PATTERN	120/576		
0953/2153	SURFACE ANALYSIS	120/576	06/18	2
1017/2217	24HR WIND/WAVE FORECAST	120/576	00/12	3
1027/2227	24HR SURFACE FORECAST	120/576	00/12	3
1037/2237	48HR SURFACE FORECAST	120/576	00/12	1
1047/2247	48HR WIND/WAVE FORECAST	120/576	00/12	1
1057/2257	5-DAY SEA ICE FORECAST/SEA ICE ANALYSIS	120/576	LATEST	6
1117/2317	GOES IR SATELLITE IMAGE	120/576	00/12	5
1128/2328	48HR WAVE PERIOD, SWELL DIRECTION	120/576	00/12	1
1138/2338	48HR 500 MB ANALYSIS	120/576	00/12	1
1148/-----	SEA SURFACE TEMPERATURE ANALYSIS	120/576	LATEST	4
1159/-----	COOK INLET SEA ICE FORECAST	120/576	LATEST	7
-----/2348	96HR SURFACE FORECAST	120/576	1200	1
-----/2358	96HR WIND/WAVE FORECAST	120/576	1200	1
-----/0008	96HR WAVE PERIOD, SWELL DIRECTION	120/576	1200	1
-----/0018	96HR 500 MB ANALYSIS	120/576	1200	1

MAP AREAS:

1. 20N - 70N, 115W - 135E	2. 40N - 70N, 125W - 150E
3. 40N - 70N, 115W - 170E	4. 40N - 60N, 125W - 160E
5. 05N - 60N, 110W - 160W	6. ICE COVERED AK WATERS
7. COOK INLET	

NOTES: 1. CARRIER FREQUENCY IS 1.9 kHz BELOW THE ASSIGNED FREQUENCY
 2. COMMENTS AND SUGGESTIONS SHOULD BE DIRECTED TO:

METEOROLOGIST-IN-CHARGE
 NATIONAL WEATHER SERVICE/NOAA
 6930 SAND LAKE ROAD
 ANCHORAGE, AK 99502-1845
 PH: (907) 266-5105/FAX: (907) 266-5188
 E-MAIL: nwsfoanc@alaska.net

(EFFECTIVE DATE JUNE 15, 2005)
 (INFORMATION DATED APRIL 28, 2005)

<http://weather.noaa.gov/fax/alaska.shtml>

PT. REYES, CALIFORNIA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NMC	4346 kHz 8682 kHz 12786 kHz 17151.2 kHz 22527 kHz	NIGHT CONTINUOUS CONTINUOUS CONTINUOUS DAY	F3C F3C F3C F3C F3C	4 KW 4 KW 4 KW 4 KW 4 KW
TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0140/1400	TEST PATTERN	120/576		
0143/1403	NE PACIFIC GOES IR SATELLITE IMAGE	120/576	00/12	6
0154/1414	PACIFIC GOES IR SATELLITE IMAGE	120/576	00/12	5
0205/1425	TROPICAL SEA STATE ANALYSIS	120/576	00/12	4
0215/1435	TROPICAL 24 HR WIND/WAVE FORECAST	120/576	00/12	4
0225/-----	TROPICAL 48 HR WIND/WAVE FORECAST	120/576	0000	4
0235/-----	TROPICAL 72 HR WIND/WAVE FORECAST	120/576	0000	4
0245/1445	500MB ANALYSIS	120/576	00/12	1
0255/1455	SEA STATE ANALYSIS	120/576	00/12	1/8
0305/1505	PRELIMINARY SURFACE ANALYSIS (PART 1 NE PACIFIC)	120/576	00/12	2
0318/1518	PRELIMINARY SURFACE ANALYSIS (PART 2 NW PACIFIC)	120/576	00/12	3
0331/1531	FINAL SURFACE ANALYSIS (PART 1 NE PACIFIC)	120/576	00/12	2
0344/1544	FINAL SURFACE ANALYSIS (PART 2 NW PACIFIC)	120/576	00/12	3
0357/1557	TROPICAL CYCLONE DANGER AREA (see note 1)	120/576	03/15	10
0408/1608	TROPICAL SURFACE ANALYSIS	120/576	00/12	4
0655/1840	TEST PATTERN	120/576		
0657/-----	2033Z REBROADCAST (96HR 500MB)	120/576	1200	1
0707/-----	2043Z REBROADCAST (96HR SURFACE)	120/576	1200	1
0717/-----	2053Z REBROADCAST (96HR WIND/WAVE)	120/576	1200	1
0727/-----	2103Z REBROADCAST (96HR WAVE PERIOD)	120/576	1200	1
-----/1842	SST ANALYSIS	120/576	LATEST	9
-----/1852	SST ANALYSIS	120/576	LATEST	6
0737/1902	TROPICAL GOES IR SATELLITE IMAGE	120/576	06/18	7
0748/1913	SEA STATE ANALYSIS	120/576	06/18	8
0758/1923	24HR 500MB FORECAST	120/576	00/12	1
0808/1933	24HR SURFACE FORECAST	120/576	00/12	8
0818/1943	24HR WIND/WAVE FORECAST	120/576	00/12	8
0828/1953	48HR 500MB FORECAST	120/576	00/12	1
0838/2003	48HR SURFACE FORECAST	120/576	00/12	1
0848/2013	48HR WIND/WAVE FORECAST	120/576	00/12	1
0858/2023	48HR WAVE PERIOD/SWELL DIRECTION FORECAST	120/576	00/12	1
-----/2033	96HR 500MB FORECAST	120/576	1200	1
-----/2043	96HR SURFACE FORECAST	120/576	1200	1
-----/2053	96HR WIND/WAVE FORECAST	120/576	1200	1
-----/2103	96HR WAVE PERIOD FORECAST	120/576	1200	1
0908/2113	PACIFIC GOES IR SATELLITE IMAGE	120/576	06/18	5
0919/2124	SURFACE ANALYSIS (PART 1 NE PACIFIC)	120/576	06/18	2
0932/2137	SURFACE ANALYSIS (PART 2 NW PACIFIC)	120/576	06/18	3
0945/2150	TROPICAL SURFACE ANALYSIS	120/576	06/18	4
0959/2204	TROPICAL 24HR WIND/WAVE FORECAST	120/576	06/18	4
1009/2214	TROPICAL CYCLONE DANGER AREA (see note 1)	120/576	09/21	10
1120/2320	TEST PATTERN	120/576		
1124/2324	BROADCAST SCHEDULE (PART 1)	120/576		
1135/2335	BROADCAST SCHEDULE (PART 2)	120/576		
1146/-----	REQUEST FOR COMMENTS	120/576		
1157/-----	PRODUCT NOTICE BULLETIN	120/576		
1208/-----	TROPICAL 48HR WIND/WAVE FORECAST	120/576	1200	4
1218/-----	TROPICAL 72HR WIND/WAVE FORECAST	120/576	1200	4
1228/2346	TROPICAL 48 HR WAVE PERIOD/SWELL DIRECTION	120/576	12/00	4
-----/2356	TROPICAL 72 HR WAVE PERIOD/SWELL DIRECTION	120/576	1200	4

- MAP AREAS:
- | | | | |
|----|-------------------------|-----|-------------------------|
| 1. | 20N - 70N, 115W - 135E | 2. | 20N - 70N, 115W - 175W |
| 3. | 20N - 70N, 175W - 135E | 4. | 20S - 30N, EAST OF 145W |
| 5. | 05N - 60N, WEST OF 100W | 6. | 23N - 42N, EAST OF 136W |
| 7. | 05N - 55N, EAST OF 130W | 8. | 25N - 60N, EAST OF 155W |
| 9. | 40N - 53N, EAST OF 136W | 10. | ON - 40N, 80W - 180W |

PT. REYES, CALIFORNIA, U.S.A.

NOTES:1.REPLACED BY HIGH WIND/WAVE WARNING WHEN NOT IN HURRICANE SEASON

2.CARRIER FREQUENCY IS 1.9 KHZ BELOW ASSIGNED FREQUENCY

3. COMMENTS AND SUGGESTIONS CONCERNING THIS BROADCAST SHOULD BE DIRECTED TO:

NATIONAL WEATHER SERVICE/NOAA
NATIONAL CENTER FOR ENVIRONMENTAL PREDICTION
MARINE FORECAST BRANCH W/NMC31
5200 AUTH ROAD
CAMP SPRINGS, MD 20746-4304
PHONE: (301) 763-8000 X7401/FAX: (301) 763-8085
EMAIL: David.Feit@noaa.gov

(SCHEDULE EFFECTIVE JUNE 15, 2005 1400 UTC)
(INFORMATION DATED JUNE 09, 2005)

<http://weather.noaa.gov/fax/ptreyes.shtml>

NEW ORLEANS, LOUISIANA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NMG	4317.9 kHz	CONTINUOUS	F3C	4 KW
	8503.9 kHz	CONTINUOUS	F3C	4 KW
	12789.9 kHz	CONTINUOUS	F3C	4 KW
	17146.4 kHz	1200-2045	F3C	4 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	TEST PATTERN	120/576		
0005/1205	U.S. / TROPICAL SURFACE ANALYSIS (W HALF)	120/576	18/06	1
0020/1220	TROPICAL SURFACE ANALYSIS (E HALF)	120/576	18/06	2
0035/1235	24 HR WIND/WAVE FORECAST	120/576	00/12	3
0045/1245	48 HR WIND/WAVE FORECAST	120/576	00/12	3
0055/1255	72 HR WIND/WAVE FORECAST	120/576	00/12	3
0105/1305	24 HR SURFACE FORECAST	120/576	00/12	3
0115/1315	48 HR SURFACE FORECAST	120/576	00/12	3
0125/1325	72 HR SURFACE FORECAST	120/576	00/12	3
0135/1335	TROPICAL CYCLONE DANGER AREA* or HIGH WIND/WAVES	120/576	21/09	6
0150/-----	72 HR WAVE PERIOD/SWELL DIRECTION	120/576	0000	3
-----/1350	(REBROADCAST OF 0150)	120/576	0000	3
0200/1400	GOES IR TROPICAL SATELLITE IMAGE	120/576	00/12	4
0215/1415	00HR SEA STATE ANALYSIS	120/576	00/12	3
-----/1425	PRODUCT NOTICE BULLETIN	120/576		
0225/1445	HIGH SEAS FORECAST (IN ENGLISH)	120/576	22/10	5
0600/1800	TEST PATTERN	120/576		
0605/1805	U.S. / TROPICAL SURFACE ANALYSIS (W HALF)	120/576	00/12	1
0620/1820	TROPICAL SURFACE ANALYSIS (E HALF)	120/576	00/12	2
0635/1835	24 HR WIND/WAVE FORECAST	120/576	06/18	3
0645/1845	REBROADCAST OF 0045/1245	120/576	00/12	3
0655/1855	REBROADCAST OF 0055/1255	120/576	00/12	3
0705/1905	REBROADCAST OF 0105/1305	120/576	00/12	3
0715/1915	REBROADCAST OF 0115/1315	120/576	00/12	3
0725/1925	REBROADCAST OF 0125/1325	120/576	00/12	3
0735/1935	TROPICAL CYCLONE DANGER AREA* or HIGH WIND/WAVES	120/576	03/15	6
0750/1950	48 HR WAVE PERIOD/SWELL DIRECTION	120/576	12/00	3
0800/2000	GOES IR TROPICAL SATELLITE IMAGE	120/576	07/18	4
0815/2015	REBROADCAST OF 0215/1415	120/576	00/12	3
0825/2025	REQUEST FOR COMMENTS/BROADCAST SCHEDULE	120/576		
0845/2045	HIGH SEAS FORECAST (IN ENGLISH)	120/576	04/16	5

NOTES: 1.REPLACED BY HIGH WIND/WAVE WARNING WHEN NOT IN HURRICANE SEASON

DEC 01 - MAY 15. VALID TIMES 00Z, 06Z, 12Z AND 18Z. 05N - 40N, 35W - 100W

2.CARRIER FREQUENCY IS 1.9 KHZ BELOW ASSIGNED FREQUENCY

3.THIS BROADCAST ORIGINATES FROM THE TROPICAL PREDICTION CENTER (FORMERLY THE NATIONAL HURRICANE CENTER) OF THE NATIONAL WEATHER SERVICE.
COMMENTS AND SUGGESTIONS SHOULD BE DIRECTED TO:

TROPICAL PREDICTION CENTER
ATTN: CHIEF OF TAFB
11691 SOUTHWEST 17TH STREET
MIAMI, FL 33165-2149
PHONE: (305) 229-4430/FAX: (305) 553-1264
EMAIL: tpc.mar@noaa.gov

MAP AREAS: 1. 05S-50N, 55W-125W
2. 05S-50N, 00W-070W
3. 00N-31N, 35W-100W
4. 12S-44N, 28W-112W
5. 07N-31N, 35W-098W (AREA COVERED BY TEXT FORECAST)
6. 05N-60N, 00W-100W

(Information dated Feb 10, 2004) <http://weather.noaa.gov/fax/gulf.shtml>

BOSTON, MASSACHUSETTS, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NMF	4235 kHz	0230z-1015z	F3C	4 KW
	6340.5 kHz	CONTINUOUS	F3C	4 KW
	9110 kHz	CONTINUOUS	F3C	4 KW
	12750 kHz	1400z-2215z	F3C	4 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0230/1400	TEST PATTERN	120/576		
-----/1405	BROADCAST SCHEDULE (PART 1)	120/576		
-----/1420	BROADCAST SCHEDULE (PART 2)	120/576		
-----/1433	REQUEST FOR COMMENTS	120/576		
-----/1443	PRODUCT NOTICE BULLETIN	120/576		
0233/1453	PRELIMINARY SURFACE ANALYSIS	120/576		
0243/-----	BROADCAST SCHEDULE (PART 1)	120/576		
0254/-----	BROADCAST SCHEDULE (PART 2)	120/576		
0305/-----	REQUEST FOR COMMENTS	120/576		
-----/1503	GOES IR SATELLITE IMAGE	120/576	1200	5
0315/1515	SEA STATE ANALYSIS	120/576	00/12	1
0325/1525	SURFACE ANALYSIS (PART 1 NE ATLANTIC)	120/576	00/12	2
0338/1538	SURFACE ANALYSIS (PART 2 NW ATLANTIC)	120/576	00/12	3
0351/-----	GOES IR SATELLITE IMAGE	120/576	0000	5
-----/1600	ICE CHARTS (FROM INTERNATIONAL ICE PATROL)	120/576	LATEST	
-----/1720	TEST PATTERN	120/576		
0402/1723	SURFACE ANALYSIS (PART 1) (REBROADCAST OF 0325/1525)	120/576	00/12	2
0415/1736	SURFACE ANALYSIS (PART 2) (REBROADCAST OF 0338/1538)	120/576	00/12	3
0428/1749	500MB ANALYSIS	120/576	00/12	4
-----/1759	SEA STATE ANALYSIS	120/576	1200	4
0438/1810	ICE CHARTS (FROM INTERNATIONAL ICE PATROL)	120/576	LATEST	
0452/1824	TROPICAL CYCLONE DANGER AREA* or HIGH WIND/WAVES	120/576	03/15	7
0745/1900	TEST PATTERN	120/576		
0755/-----	PRELIMINARY SURFACE ANALYSIS	120/576	0600	1
0805/1905	24HR SURFACE FORECAST	120/576	00/12	1
0815/1915	24HR WIND/WAVE FORECAST	120/576	00/12	1
0825/1925	24HR 500MB FORECAST	120/576	00/12	1
0835/1935	36HR 500MB FORECAST	120/576	12/00	4
0845/1945	48HR 500MB FORECAST	120/576	00/12	4
0855/1955	48HR SURFACE FORECAST	120/576	00/12	4
0905/2005	48HR WIND/WAVE FORECAST	120/576	00/12	4
0915/2015	48HR WAVE PERIOD FORECAST	120/576	00/12	4
-----/2025	PRELIMINARY SURFACE ANALYSIS	120/576	1800	1
-----/2035	96HR 500MB FORECAST	120/576	1200	4
-----/2045	96HR SURFACE FORECAST	120/576	1200	4
-----/2055	96HR WIND/WAVE FORECAST	120/576	1200	4
-----/2105	96HR WAVE PERIOD FORECAST	120/576	1200	4
-----/2115	96HR SURFACE FORECAST (REBROADCAST OF 2045)	120/576	1200	4
0925/2125	SURFACE ANALYSIS (PART 1 NE ATLANTIC)	120/576	06/18	2
0938/2138	SURFACE ANALYSIS (PART 2 NW ATLANTIC)	120/576	06/18	3
0951/2151	GOES IR SATELLITE IMAGE	120/576	06/18	6
1002/2202	SURFACE ANALYSIS (PART 1) (REBROADCAST OF 0925/2125)	120/576	06/18	2
1015/2215	SURFACE ANALYSIS (PART 2) (REBROADCAST OF 0938/2138)	120/576	06/18	3
1028/2228	TROPICAL CYCLONE DANGER AREA* or HIGH WIND/WAVES	120/576	09/21	7

MAP AREAS 1. 28N-52N, 45W-85W 2. 18N-65N, 10E-45W
 3. 18N-65N, 40W-95W 4. 18N-65N, 10E-95W
 5. 20N-55N, 55W-95W 6. EQ-60N, 40W-130W 7. 05N-60N, 0W-100W *

* Tropical Cyclone Danger Area chart replaced by High Wind/Wave Warning chart

Dec 01-May 15. Valid times 00z, 06z, 12z and 18z. Map area 05N-40N, 35W-100W

NOTES: 1. CARRIER FREQUENCY IS 1.9 KhZ BELOW THE ASSIGNED FREQUENCY.
 2. COMMENTS AND SUGGESTIONS SHOULD BE DIRECTED TO:

NATIONAL WEATHER SERVICE/NOAA
 NATIONAL CENTER FOR ENVIRONMENTAL PREDICTION
 MARINE FORECAST BRANCH W/NMC31
 5200 AUTH ROAD
 CAMP SPRINGS, MD 20746-4304
 PHONE: (301) 763-8000 X7401/FAX: (301) 763-8085
 EMAIL: David.Feit@noaa.gov

INUVIK, CANADA

CALL SIGN VFA	FREQUENCIES 8457.8 kHz	TIMES	EMISSION J3C	POWER 1 KW
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME
				MAP AREA
0200	Marine Surface Analysis (Availability of charts may vary depending on shipping Ice Analysis (mid July to October 15) Amundsen Gulf, Queen Maud and McClure Strait. Ice Analysis Beaufort Sea/Alaskan Coast		120/576	1200
1630	Marine Surface Analysis (Availability of charts may vary depending on shipping Ice Analysis (mid July to October 15) Amundsen Gulf, Queen Maud and McClure Strait. Ice Analysis Beaufort Sea/Alaskan Coast		120/576	1200

Note: Also available on request

(INFORMATION DATED May 2005) <http://www.ccg-gcc.gc.ca/mcts-sctm/ramn/docs/ca.pe/pe2-5.htm>
(Update Mar 2002) Frequencies listed may be carrier frequencies, add 1.9 kHz for center frequency.

PACIFIC
OCEAN
BASIN

CHARLEVILLE, AUSTRALIA

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
VMC	2628 kHz	0900-1900	F3C	1 KW
VMC	5100 kHz	CONTINUOUS	F3C	1 KW
VMC	11030 kHz	CONTINUOUS	F3C	1 KW
VMC	13920 kHz	CONTINUOUS	F3C	1 KW
VMC	20469 kHz	1900-0900	F3C	1 KW

WILUNA, AUSTRALIA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
VMW	5755 kHz	1100-2100	F3C	1 KW
VMW	7535 kHz	CONTINUOUS	F3C	1 KW
VMW	10555 kHz	CONTINUOUS	F3C	1 KW
VMW	15615 kHz	CONTINUOUS	F3C	1 KW
VMW	18060 kHz	2100-1100	F3C	1 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-----/1200	Australian MSLP Prog (H+36)	120/576	1200	AUST
0015/1215	VMC/VMW Schedule Page 1 of 2	120/576		
0030/1230	VMC/VMW Schedule Page 2 of 2	120/576		
0045/-----	VMC/MW Information Notice	120/576		
0100/-----	IPS Recommended Frequencies for VMC (Charleville)	120/576		
0130/-----	IPS RECOMMENDED FREQUENCIES FOR VMW	120/576		
-----/1245	Indian Ocean MSLP Prog (H+36)	120/576	1200	IO
-----/1300	Australian Sigwx Prog Valid	120/576	0600	RSW
-----/1315	South Pacific Ocean Total Waves (H+48)	120/576	0000	SWP
-----/1330	Indian Ocean Total Waves (H+48)	120/576	0000	IO
-----/1345	Pacific Ocean Sea Surface Temps (Weekly)	120/576	LATEST	SWP
-----/1400	Indian Ocean Sea Surface Temps (Weekly)	120/576	LATEST	IO
0200/-----	Australian MSLP Prog (H+24)	120/576	0000	AUST
0215/-----	Australian Sigwx Prog	120/576	1800	RSW
0230/-----	Asian Current Warnings Summary	120/576	LATEST	H
-----/1415	Casey Eastern and Western High Seas (H+48)	120/576	0000	
0245/1430	Australian MSLP Anal (Manual)	120/576	00/12	AUST
-----/1445	Asian Current Warnings	120/576	LATEST	H
0300/1500	Australian 500 hPa Anal	120/576	00/12	AUST
0315/-----	Voice Broadcast Information for VMW (Wiluna)	120/576		
-----/1515	Australian MSLP Prog (H+36)	120/576	1200	AUST
0330/1530	Asian Sigwx Prog Valid	120/576	12/00	D
0400/1600	Australian 500 hPa (H+24) Prog	120/576	00/12	AUST
0430/-----	Australian MSLP 4-day forecast, Days 1 and 2	120/576		
0445/-----	Australian MSLP 4-day forecast, Days 3 and 4	120/576		
-----/1630	IPS Recommended Frequencies for VMC (Charleville)	120/576		
-----/1700	IPS Recommended Frequencies for VMW (Wiluna)	120/576		
0600/1800	Asian (Part A) Gradient Level Wind Anal (Manual)	120/576	00/12	A
0623/1823	Asian (Part B) Gradient Level Wind Anal (Manual)	120/576	00/12	B
0645/-----	Asian MSLP Anal (Manual)	120/576	0000	C
0715/1900	Australian Sigwx Prog	120/576	00/12	RSW
0730/1915	Indian Ocean MSLP Anal (Manual)	120/576	00/12	IO
0745/1930	Australian Wind Waves Ht(m) Prog	120/576	00/12	AUST
0800/1945	Australian Swell Waves Ht(m) Prog (H+24)	120/576	00/12	AUST
0815/-----	Asian Current Warnings Summary	120/576	LATEST	H
0830/-----	South Pacific Ocean MSLP Anal	120/576	0000	SWP
0845/-----	Australian MSLP Anal (Manual)	120/576	0600	AUST
-----/2000	South Pacific Ocean MSLP Anal (Manual)	120/576	1200	SWP
-----/2015	Casey Eastern and Western High Seas (H+24)	120/576	1200	
-----/2030	Australian MSLP Anal (Manual)	120/576	1800	AUST
-----/2045	Asian Current Warnings Summary	120/576	LATEST	H
0903/2100	Asian 200 hPa Streamline Anal	120/576	00/12	C
0923/2120	Asian 500 hPa Streamline Anal	120/576	00/12	C
0941/2140	Asian 700 hPa Streamline Anal	120/576	00/12	C
1000/2200	Asian Sigwx Prog	120/576	18/06	D
1015/-----	Casey Eastern and Western High Seas (H+24)	120/576	0000	
-----/2215	Casey Eastern and Western High Seas (H+36)	120/576	1200	
1030/2230	S.H. 500 hPa Prog (H+48)	120/576	00/12	SH
1045/2245	S.H. MSLP Prog (H+48)	120/576	00/12	SH
1100/-----	Casey Eastern and Western High Seas (H+36)	120/576	0000	
1115/2300	S.H. 500 hPa Anal	120/576	00/12	SH

CHARLEVILLE & WILUNA, AUSTRALIA

TIME TIME	CONTENTS OF TRANSMISSION AREA	RPM/IOC	VALID	MAP
-----/2315	Casey Eastern and Western High Seas (H+48)	120/576	1200	
1130/-----	Asian Sea Surface Temp Anal (Weekly)	120/576	LATEST	E
-----/2330	Australian MSLP Prog (H+36)	120/576	0000	AUST
-----/2345	Indian Ocean MSLP Prog (H+48)	120/576	1200	IO
1145/-----	VMC/VMW Information Notice	120/576		

NOTES:

1. ALL WEEKLY OCEANOGRAPHIC PRODUCTS, SUCH AS SEA SURFACE TEMPERATURE CHARTS, WHICH WERE BROADCAST ONLY ONE DAY A WEEK, ARE NOW BROADCAST EVERY DAY. HOWEVER, NOTE THE CHARTS ARE ONLY UPDATED ONCE A WEEK, BUT BROADCAST EVERY DAY UNTIL A NEW CHART IS AVAILABLE TO REPLACE THE OLD CHART.
2. FOR FURTHER INFORMATION CONTACT:

SYSTEM HELP DESK
 PH: (+613) 9662 2182
 FAX: (+613) 9662 1223
 EMAIL: opsgen@bom.gov.au

MAP AREAS:	A:	30N - 35S, 120E - 180
	B:	30N - 35S, 070E - 130E
	C:	30N - 35S, 070E - 180
	D:	43S 110E, 34S 155E, 34N 142E, 29N 096E
	E:	23N - 23S, 100E - 170E
	H:	25N - 25S, 080E - 180
	AUST:	LAMBERT 10S 090E, 50S 080E, 10S 170E, 50S 180
	SEAUST-	MERCATOR 31S - 40S, 148E - 156E
	SWAUST	MERCATOR 25S - 37S, 110E - 120E
	RSW -	MERCATOR 0S - 50S, 100E - 180
	IO -	POLAR 10S - 90S, EQ - 090E - 180
	SWP -	POLAR 20S - 90S, 150E - 180 - 90W
	SH -	POLAR 10S - 90S, ALL LONGITUDES

(Schedule Effective ??????)
 (INFORMATION DATED 2004)

http://www.bom.gov.au/nmoc/rad_sch/

WELLINGTON, NEW ZEALAND

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
ZKLF	3247.4 kHz	0945-1700	F3C	5 KW
	5807 kHz	CONTINUOUS	F3C	5 KW
	9459 kHz	CONTINUOUS	F3C	5 KW
	13550.5 kHz	CONTINUOUS	F3C	5 KW
	16340.1 kHz	2145-0500	F3C	5 KW

Single transmitter used. Times below reflect broadcast times at 5807 kHz
 Add 15 minutes for 9459 kHz, 30 minutes for 13550.5 kHz and 45 minutes for 3247.4 and 16340.1 kHz

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	SOUTHWEST PACIFIC 30HR SURFACE PROG (MSL)	120/576	00/12	SWP
0100/1300	SOUTHWEST PACIFIC 48HR SURFACE PROG (MSL)	120/576	00/12	SWP
0200/1400	SOUTHWEST PACIFIC 72HR SURFACE PROG (MSL)	120/576	00/12	SWP
0300/1600	TASMAN-NEW ZEALAND MSL ANALYSIS	120/576	00/12	TNZ
0400/1600	SOUTHWEST PACIFIC MSL ANALYSIS	120/576	00/12	SWP
0900/2100	TASMAN-NEW ZEALAND MSL ANALYSIS	120/576	06/18	TNZ
1000/2200	SOUTHWEST PACIFIC MSL ANALYSIS	120/576	06/18	SWP
1100/2300	TRANSMISSION SCHEDULE			

MAP AREAS: TNZ - TASMAN SEA - NEW ZEALAND
 SWP - SOUTHWEST PACIFIC

(INFORMATION DATED MAY 2002) <http://www.metservice.co.nz/default/index.php?pkey=191620&ckey=229167>

HONOLULU, HAWAII, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
KVM70	9982.5 kHz 11090 kHz 16135 kHz	0533-1630 CONTINUOUS 1733-0437	F3C F3C F3C	4 KW 4 KW 4 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0007/1147	PACIFIC STREAMLINE ANALYSIS	120/576	18/06	K
----/1210	48 HR SURFACE FORECAST	120/576	1200	G
0030/1230	EAST PACIFIC GOES IR SATELLITE IMAGE	120/576	LATEST	EP
0045/1245	WEST PACIFIC GOES IR SATELLITE IMAGE	120/576	LATEST	SP
0103/1304	NORTH PACIFIC SURFACE PRESSURE ANALYSIS	120/576	18/06	J
0128/1328	48HR SURFACE/1000-500MB THICKNESS FORECAST	120/576	18/06	C
0148/1350	TROPICAL SURFACE ANALYSIS	120/576	18/06	H
0209/-----	24HR STREAMLINE/ISOTACH FORECAST	120/576	0000	D
0234/-----	48HR STREAMLINE/ISOTACH FORECAST	120/576	0000	D
----/1412	24HR WIND/WAVE FORECAST	120/576	0000	EE
----/1428	48HR WIND/WAVE FORECAST	120/576	0000	E
0258/1444	24 HR WIND/WAVE FORECAST	120/576	00/12	GG
0309/1503	48/72HR WIND/WAVE FORECAST	120/576	00/12	GG
0320/1522	72/48HR WAVE PERIOD/SWELL DIRECTION	120/576	00/12	J
0331/1541	REBROADCAST OF 0103/1304	120/576	18/06	GG
----/1607	24 HR SURFACE FORECAST	120/576	1200	G
0354/1618	72 HR SURFACE FORECAST	120/576	00/12	G
0405/-----	PACIFIC SEA STATE ANALYSIS	120/576	1800	D
0437/1630	TROPICAL CYCLONE DANGER AREA	120/576	03/15	M
0533/1733	TEST-ID-SYMBOLS-GENERAL NOTICE	120/576		
0545/1745	SIGNIFICANT CLOUD FEATURES	120/576	03/15	A
0605/1804	PACIFIC STREAMLINE ANALYSIS	120/576	00/12	K
0630/1827	EAST PACIFIC GOES IR SATELLITE IMAGE	120/576	LATEST	EP
0645/1842	WEST PACIFIC GOES IR SATELLITE IMAGE	120/576	LATEST	SP
0656/1853	NORTH PACIFIC SURFACE PRESSURE ANALYSIS	120/576	00/12	J
0721/1918	PACIFIC OCEAN SEA SURFACE TEMPS	120/576	LATEST	NPA
0741/1937	24 HR WIND/WAVE FORECAST	120/576	06/18	G
0800/1956	TROPICAL SURFACE ANALYSIS	120/576	00/12	H
0823/-----	24HR SEA STATE FORECAST	120/576	1800	K
1030/-----	TROPICAL CYCLONE DANGER AREA	120/570	0900	M
1045/2018	SCHEDULE PART I	120/576		
1110/2045	SCHEDULE PART II	120/576		
1132/2105	SCHEDULE PART III (will be terminated ~ Oct 18, 05)	120/576		
----/2230	TROPICAL CYCLONE DANGER AREA	120/570	2100	M
----/2335	24HR SURFACE FORECAST	120/576	0000	G
----/2345	48HR SURFACE FORECAST	120/576	0000	G

MAP AREAS: A - 50N-30S, 110W-160E J - 50N-EQ, 110W-130E
 C - 60N-55S, 055W-070E K - 30N-30S, 110W-130E
 D - 50N-30S, 100W-120E M - 30N-20S, 70W-140W
 E - 60N-35S, 110W-130E EP - 55N-40S, 110W-155E
 F - 50N-25S, 120W-120E SP - 05N-40S, 130W-165E
 G - 30N-20S, 145W-080W NPA - 55N-EQ, 010W-160E
 H - 40N-40S, 105W-120E

HONOLULU, HAWAII, U.S.A

- (1) TROPICAL STREAM-FUNCTION ANALYSIS AND THE WIND/STREAM-FUNCTION FORECAST CHARTS DISPLAY 1000 MILLIBAR STREAM FUNCTION LINES. FOR SPEEDS IN KNOTS FOR ALL LATITUDES DIVIDE 50 BY THE SPACING BETWEEN THE STREAM FUNCTION LINES EXPRESSED IN DEGREES OF LATITUDE. THESE CHARTS, COMPUTER-GENERATED, ARE PARTICULARLY USEFUL IN THE TROPICS, WHERE THE ISOBARIC SPACING AND WIND-SPEED RELATIONSHIPS BECOME LESS MEANINGFUL. ARROWS ON THE STREAM-FUNCTION ANALYSIS CHARTS DEPICT VELOCITIES IN KNOTS OF THE TOPS OF LOWER CLOUDS DERIVED FROM SUCCESSIVE OBSERVATIONS BY SATELLITE. CAUTION - THESE CHARTS, BEING COMPUTER GENERATED, MAY NOT PROPERLY DELINEATE SMALL, THOUGH INTENSE, SYSTEMS IN DATA-SPARSE AREAS. NOTES ARE MANUALLY ADDED TO DIRECT ATTENTION TO SUCH SYSTEMS WHEN PRESENT.
- (2) NORTH PACIFIC SURFACE PRESSURE ISOBARIC ANALYSIS CHARTS, MANUALLY ANALYZED AT THE WEATHER SERVICE FORECAST OFFICE/CENTRAL PACIFIC HURRICANE CENTER, HONOLULU DEPICT THE ISOBARIC (PRESSURE) FIELD NORTH OF 10N.
- (3) PACIFIC STREAMLINE ANALYSIS DEPICTS WIND DIRECTION USING STREAMLINES. THE ANALYSIS IS PRODUCED MANUALLY AT THE FORECAST OFFICE AND COVERS THE AREA BETWEEN 30S AND 30N, BETWEEN 130E AND 120W.
- (4) THE 48-HOUR ISOBARIC SURFACE/THICKNESS FORECAST CHARTS DEPICT LINES OF EQUAL PRESSURE IN MILLIBARS (SOLID LINES) AND, CHIEFLY OF INTEREST TO METEOROLOGISTS, 1000-TO-500 MILLIBAR THICKNESSES (DASHED LINES).
- (5) THE SIGNIFICANT CLOUD FEATURES CHARTS DEPICT CLOUD FEATURES BASED UPON IMAGES FROM THE VARIOUS GEOSTATIONARY AND POLAR ORBITING SATELLITES OVER THE PACIFIC. ABBREVIATIONS ON THESE CHARTS INCLUDE: AC - ALTOCUMULUS; AS - ALTOSTRATUS; BKN - BROKEN; CB - CUMULONIMBUS; CC - CIRROCUMULUS; CI - CIRRUS; CS - CIRROSTRATUS; CU - CUMULUS; FEW - FEW; ISOL - ISOLATED; LYRS - LAYERS; NS - NIMBOSTRATUS; OVC - OVERCAST; SC - STRATO-CUMULUS; SCT - SCATTERED; TCU - TOWERING CUMULUS; TSTM - THUNDERSTORM
- (6) TROPICAL CYCLONE DANGER GRAPHIC TRANSMITTED DURING HURRICANE SEASON.
- (7) RADIOFAX FREQUENCIES ARE ASSIGNED FREQUENCIES. TO CONVERT TO CARRIER FREQUENCIES, SUBTRACT 1.9 KHZ FROM THE ASSIGNED FREQUENCIES.
- (8) BROADCAST MAY BE PERFORMED CONTINUOUSLY ON FOUR LISTED FREQUENCIES WHEN RESOURCES ARE AVAILABLE.
- (9) YOU MAY ADDRESS COMMENTS ABOUT THIS BROADCAST TO:

KVM70
National Weather Service
2525 Correa Rd.
Honolulu, HI 96822-2219
PHONE: (808) 973-5275/FAX: (808) 973-5281
E-Mail Nezette.Rydell@noaa.gov

(Schedule effective June 15, 2005 1733 UTC)
(INFORMATION DATED Oct 18, 2005) <http://weather.noaa.gov/fax/hawaii.shtml>

EUROPE

SKAMLEBAEK, DENMARK

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
OXT (1)	5850 kHz 9360 kHz	0028-1005 0003-0025 1008-1215 1243-1305 1828-1850	F3C	20 KW
	13855 kHz	1218-1240 1308-1330 1803-1825	F3C	20 KW
	17510 kHz	1333-1355	F3C	20 KW
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME MAP AREA
0003(2) 0028 0943 1008 1153 1218 1243 1308 1333 1803 1828	ICE CHART #2 (OR #1) ICE CHART #2 (OR #1) ICE CHART #1 ICE CHART #1 ICE CHART #1 ICE CHART #1 ICE CHART #2 (OR#1) ICE CHART #2 (OR #1) ICE CHART #2 (OR #1) ICE CHART #1 ICE CHART #1		120/576 120/576 120/576 120/576 120/576 120/576 120/576 120/576 120/576 120/576 120/576	

- NOTES :
 (1) CALL SIGN IS TRANSMITTED FOR A PERIOD OF 2 MINUTES IMMEDIATELY PRIOR TO CHART TRANSMISSION.
 (2) EITHER ONE OF CHART #2 IS TRANSMITTED IF AVAILABLE, OTHERWISE CHART #1 IS TRANSMITTED.
 (3) CHART #1 COVERS THE SOUTHERN TIP OF GREENLAND. CHART #2 IS A SECTION, WHICH MAY COVER ANY AREA NORTH OF 62 DEGREES NORTH ACCORDING TO NEED AND TIME OF YEAR EITHER ON WEST OR EAST COAST OF GREENLAND.

(INFORMATION DATED Feb 10, 04)

<http://www.dmi.dk/dmi/index/viden/sendeplan.htm>

ATHENS, GREECE

CALL SIGN	FREQUENCY	TIMES	EMISSION	POWER
SVJ4	4481 kHz		F3C	0.4 KW
SVJ4	8105 kHz		F3C	0.4KW
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME MAP AREA
0845 0857 0909 0921 0933 0945 0957 1009 1021 1033 1044	SURFACE ANALYSIS SURFACE PROG (H+24) SURFACE PROG (H+48) WAVE HEIGHT PROG (H+30) WAVE HEIGHT PROG (H+36) WAVE HEIGHT PROG (H+42) WAVE HEIGHT PROG (H+48) WAVE HEIGHT PROG (H+30) WAVE HEIGHT PROG (H+36) WAVE HEIGHT PROG (H+42) WAVE HEIGHT PROG (H+48)		120/576 120/576 120/576 120/576 120/576 120/576 120/576 120/576 120/576 120/576 120/576	0600 0600 0600 1200 1200 1200 1200 1200 1200 1200 1200

MAP AREA: A - SOUTH EUROPE , MEDITERRANEAN SEA, BLACK SEA
 B - MEDITERRANEAN
 C - AEGEAN

(INFORMATION DATED (04/2001)

HAMBURG/PINNEBERG, GERMANY

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
DDH3	3855 kHz	CONTINUOUS	F1C	10 KW
DDK3	7880 kHz	CONTINUOUS	F1C	20 KW
DDK6	13882.5 kHz	CONTINUOUS	F1C	20 KW
TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-----/1206	H+96 (GSM) Sea and swell, Wind (10 m)	120/576	0000	
-----/1219	Ice Chart northwesternpart atlantik	120/576	0000	
-----/1232	Ice Chart Western Baltic	120/576	0000	
-----/1520	Ice conditions chart West Baltic Sea or special area	120/576	0900	
-----/1540	Ice conditions chart West Baltic Sea or special area	120/576	0900	
0430/1600	Surface weather chart	120/576	00/12	
0500-----	H + 00, H + 24(GME) surface P and wind (10m)	120/576	0000	
0512/-----	h + 30 (GME) surface pressure	120/576	1800	
0525/1800	surface pressure analysis, arrows showing the movement of pressure systems, signifivant weather, ice	120/576	00/12	
0546/1821	Information of tropical storms, North Atlantic (during the season)	120/576	03/15	
-----/1834	H+24 (GME) surface pressure	120/576	1200	
0559/-----	H + 12, H + 24 (GME) 500 hPa H + T, surface P	120/576	0000	
0612/-----	H + 12, H + 24 (GME) 850 hPa H + T, 700 hPa U	120/576	0000	
0625/-----	H + 36, H + 48 (GME) 500 hPa H + T, surface P	120/576	0000	
0638/-----	H + 36, H + 48 (GME) 850 hPa H + T, 700 hPa U	120/576	0000	
0651/-----	H + 60, H + 72 (GME) 500 hPa H + T, surface P	120/576	0000	
0704/-----	H + 60, H + 72 (GME) 850 hPa H + T, 700 hPa U	120/576	0000	
0717/-----	Repetition chart 0512 UTC	120/576	1800	
0730/1847	H+48 (GME) surface pressure/ Repetition	120/576	00/12	
0743/-----	Repetition chart 0525 UTC	120/576	0000	
0804/1900	H+72 (GME) surface pressure/ Repetition	120/576	00/12	
-----/1912	H + 00, H + 24(GME) surface P and wind (10m)	120/576	00/12	
0817/-----	H+96 (GME) surface pressure	120/576	0000	
0830/1924	analysis (GME) 500 hPa, pressure	120/576	00/12	
0842/1936	H+36, H+48 (GME) surface P and wind (10 m)	120/576	00/12	
0854/1948	H+24 (GME) 850 hPa, 700 hPa, U	120/576	00/12	
0906/2000	H+36 (GME) 850 hPa, 700 hPa, U	120/576	00/12	
0918/2012	H+72, H+96 (GME) surface P and wind (10 m)	120/576	00/12	
0930/2024	H+24 (GSM) Sea and swell, Wind (10 m)	120/576	00/12	
0943/-----	Sea surface temperature North Sea	120/576	0000	
1004/2036	H+48 (GSM) Sea and swell, Wind (10 m)	120/576	0000	
1016/2048	H+72 (GSM) Sea and swell, Wind (10 m)	120/576	00/12	
-----/2100	Ice conditions chart Nortwest Atlantic	120/576	1200	
-----/2115	Ice conditions chart West Baltic Sea	120/576	1500	
1029/2137	H+48 wave prediction	120/576	00/12	
1050/2200	Surface weather chart	120/576	06/18	
1111/-----	Transmission schedule	120/576		
1132/-----	Test chart	120/576		
1145/-----	Repetition chart 1050 utc	120/576	0600	

Notes: Abbreviations have the following meaning: GME Global model (31 layers, 60 km)
H Contour lines (gpdam) MSL Mean sea level T Isotherms (° C) U Relative humidity (%)

(INFORMATION DATED (July 19 2005)
http://www.dwd.de/de/wir/Geschaeftsfelder/Seeschiffahrt/Sendeplaene/e_faxplan.htm

ROME, ITALY

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER	
IMB51	4777.5 kHz	CONTINUOUS	F3C	5 KW	
IMB55	8146.6 kHz	CONTINUOUS	F3C	5 KW	
IMB56	13597.4 kHz	CONTINUOUS	F3C	5 KW	
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0048/-----	FL 390, 340, 300, 240, 180, 100, 50 SW for 12/Z di BRACKNELL	120/576			
0248/-----	SW TMW FL 100.450 for 12/Z di BRACKNELL	120/576			
0345/-----	SW TMW FL 100.450 FOR 12/Z (in mancanza della SW delle 02:48)	120/576			
0400/-----	DP 3H 00/Z; AU 500/00Z	120/576			
0415/-----	AS (ORA LEGALE) 00/Z	120/576			
0425/-----	FRZL 00/Z; AU850 00/Z	120/576			
0437/-----	ITALIA 03/Z	120/576			
0457/-----	AS (ORA SOLARE) 00/Z	120/576			
0510/-----	AU 700 00/Z; AU 300 00/Z	120/576			
0522/-----	AU 200 00/Z; TMW 00/Z	120/576			
0535/-----	SWL for 12/Z	120/576			
0654/-----	FL 390, 340, 300, 240, 180, 100, 50 SW for 18/Z di BRACKNELL	120/576			
0848/-----	SW TMW FL 100-450 for 18/Z di BRACKNEL	120/576			
0859/-----	FU 500 H + 36	120/576			
0906/-----	FU 500 H + 48	120/576			
0913/-----	FU 500 H + 72	120/576			
0920/-----	FU 500 H + 96	120/576			
0927/-----	FU 500 H + 120	120/576			
1000/-----	SW TMW FL 100-450 18/Z (in mancanza della SW delle 08:48)	120/576			
1030/-----	FS H + 24; DP 3 HR 06/Z	120/576			
1045/-----	AS 06/Z	120/576			
1140/-----	SWL for 18/Z	120/576			
1153/-----	STATO DEL MEDITERRANEO for 12/Z	120/576			
1200/-----	ITALIA 09/Z	120/576			
1248/-----	FL 390, 340, 300, 240, 180, 100, 50 SW for 18/Z di BRACKNELL	120/576			
1448/-----	SW TMW FL 100-450 for 00/Z di BRACKNELL	120/576			
1555/-----	SW TMW FL 100-450 for 00/Z (in mancanza della SW delle 14:48)	120/576			
1610/-----	ITALIA 15/Z	120/576			
1630/-----	SWL for 00/Z	120/576			
1645/-----	AS 12/Z	120/576			
1700/-----	DP 3HR 12/Z; AU 500/12Z	120/576			
1715/-----	AU 700 12/Z; AU 300 12/Z	120/576			
1730/-----	AU 200 12/Z; TMW 12/Z	120/576			
1810/-----	FRZL 12/Z; AU850 12/Z	120/576			
1900/-----	FL 390, 340, 300, 240, 180, 100, 50 SW for 06/Z di BRACKNELL	120/576			
2048/-----	SW TMW FL 100-450 for 06/Z di BRACKNELL	120/576			
2230/-----	STATO DEL MEDITERRANEO for 00/Z	120/576			
2240/-----	SWL for 06/Z	120/576			
2252/-----	ITALIA 21/Z	120/576			
2312/-----	AS 18/Z	120/576			
2322/-----	FS H + 24; DP 3 HR 18/Z	120/576			
2335/-----	SW TMW FL 100-40 for 06/Z (in mancanza della SW delle 20:48)	120/576			

SW TMW: Tempo significativo + tropopausa e vento massimo;

FZRL: freezing level; SWL: tempo significativo bassi livelli;

AU: analisi in quota; FU: prevista in quota;

AS: analisi al suolo; FS: prevista al suolo,

DP: tendenza barometrica.

(Information dated 2002) http://www.marina.difesa.it/idro/documenti/avvisi/2002/15_02.zip

MOSCOW, RUSSIA

CALL SIGNS	FREQUENCIES		EMISSION	POWER	
	3830 kHz		F3C		
TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
0003/-----	18HR SIGNIFICANT WEATHER PROG BELOW 400MB		120/576	1200	Q
----/1210	24HR 300MB PROG		120/576	0000	R
0016/-----	18HR 400MB PROG		120/576	1200	M
----/1225	24HR SIGNIFICANT WEATHER PROG		120/576	0000	R
0029/-----	30HR 200MB PROG		120/576	1200	R
----/1240	18HR SIGNIFICANT WEATHER PROG ABOVE 400MB		120/576	0000	M
0044/-----	30HR 250MB PROG		120/576	1200	R
----/1253	18HR 300MB PROG		120/576	1800	R
0059/-----	30HR 300MB PROG		120/576	1200	R
----/1306	18HR SIGNIFICANT WEATHER PROG BELOW 400MB		120/576	0000	Q
0114/-----	30HR SIGNIFICANT WEATHER PROG		120/576	1200	R
----/1320	18HR 400MB PROG		120/576	1800	M
0129/-----	500MB ANALYSIS		120/576	1200	N
0151/1333	300MB ANALYSIS		120/576	1200	N
----/1355	500MB ANALYSIS		120/576	0000	N
0215/1417	SURFACE ANALYSIS		90/576	00/12	U
0245/1447	TROPOPAUSE ANALYSIS		120/576	00/12	U
0307/1509	850MB ANALYSIS		90/576	00/12	U
0337/1539	500MB ANALYSIS		90/576	00/12	U
0407/1609	1000/500MB THICKNESS ANALYSIS		90/576	00/12	U
0437/1639	SURFACE ANALYSIS		90/576	03/15	P
0513/1715	400MB ANALYSIS		90/576	00/12	U
0543/-----	24HR SURFACE PROG		120/288	0000	U
----/1745	NEPHANAL & 24HR PROG		120/576	1200	M
0555/-----	24HR/36HR 700MB PROG		120/288	00/12	U
----/1805	24HR SURFACE PROG		120/288	0000	U
0607/-----	24HR/36HR 500MB PROG		120/288	00/12	U
----/1817	30HR 200MB PROG		120/576	0600	R
0619/-----	12HR SIGNIFICANT WEATHER PROG ABOVE 400MB		120/576	1200	M
0631/-----	12HR 300MB PROG		120/576	1200	M
----/1832	30HR 250MB PROG		120/576	0600	R
0644/-----	NEPHANAL & 24HR CLOUD PROG		120/576	0000	M
----/1847	30HR 300MB PROG		120/576	0600	M
----/1902	30HR SIGNIFICANT WEATHER PROG		120/576	0600	R
0704/-----	MAX WIND ANALYSIS		120/576	0000	U
0726/1917	12HR SIGNIFICANT WEATHER PROG ABOVE 400MB		120/576	00/12	Q/M
----/1930	12HR 300MB PROG		120/576	0000	M
0739/-----	12HR 400MB PROG		120/576	1200	M
----/1943	12HR SIGNIFICANT WEATHER PROG BELOW 400MB		120/576	1200	Q
0752/-----	SURFACE ANALYSIS		90/576	0000	N
----/1956	12HR 400MB PROG		120/576	1200	M
----/2009	MAX WIND ANALYSIS		120/576	1200	U
0822/-----	SURFACE ANALYSIS		90/576	0600	U
----/2031	SURFACE ANALYSIS		90/576	1800	U
0852/-----	200MB ANALYSIS		90/576	0000	U
----/2101	SURFACE ANALYSIS		90/576	1200	N
0922/-----	24HR/36HR 850MB PROG		120/576	00/12	U
----/2131	200MB ANALYSIS		90/576	1200	U
0934/-----	36HR SURFACE PROG		120/288	0000	U
0946/-----	1000MB & 500MB ANALYSIS		90/576	1200	X
----/2201	24HR 200MB PROG		120/576	1200	R
1013/-----	48HR/72HR/96HR/120HR/144HR SURFACE GRID DATA		90/576	1200	X
----/2216	24HR 250MB PROG		120/576	1200	R

MOSCOW, RUSSIA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-----/2231	24HR 300MB PROG	120/576	1200	R
1040/2246	SURFACE ANALYSIS	90/576	09/21	P
1116/-----	TECHNICAL STOP			
-----/2322	24HR SIGNIFICANT WEATHER PROG	120/576	1200	R
-----/2337	18HR SIGNIFICANT WEATHER PROG ABOVE 400MB	120/576	1200	M
1140/-----	24HR 200MB PROG	120/576	0000	R
-----/2350	18HR 300MB PROG	120/576	0600	M
1155/-----	24HR 250MB PROG	120/576	0000	R

MAP AREAS:

M	-	1:15,000,000	56N	018W, 58N	108E,	30N	016W, 32N	072E
N	-	1:30,000,000	03N	097W, 03S	027W,	EQ	142E,	05S 077E
P	-	1:05,000,000	67N	002E, 42N	028E,	74N	061E,	44N 055E
Q	-	1:07,500,000	61N	010E, 43N	022E,	61N	071E,	43N 059E
R	-	1:30,000,000	39N	066W, 08N	014E,	18N	149E,	02S 088E
U	-	1:20,000,000	32N	051W, 15N	014E,	32N	167E,	16N 103E
X	-	1:30,000,000	NORTHERN HEMISPHERE					
			90N - 20N					

(INFORMATION DATED 11/1996)

(Update 3/2001) - Frequencies reported as 53.8, 10611 and 13886 kHz and also 5108 and 6890 kHz at irregular times.

(Update 3/2002) - Frequencies reported as 4318, 5108, 6890(night), 10611 and 13886 (night)

(Update 3/2002) - All broadcasts reported as 120/576 or 120/288 mode. 60 or 90 rpm is no longer used.

MURMANSK, RUSSIA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
RBW 41	5336 kHz		F3C	
	6445.5 kHz	CONTINUOUS	F3C	
	7908.8 kHz	1900-0600	F3C	
	10130 kHz	0600-1900	F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0700	36HR SURFACE PROG	120/576	0000	A
0800	SEA STATE ANALYSIS	120/576	0600	C
1400	SURFACE TEMP ANALYSIS/ICEBERG POSITIONS	120/576	1200	B
1400	ANAL OF ICEBERG POSITIONS FOR PAST+24HR	120/576	1200	C
1430	24HR SEA STATE PROG	120/576	1200	C
1850	BROADCAST SCHEDULE	90/576		
2000	ICEBERG PROGNOSIS	120/576		

NOTES: (1) BASIC COVERAGE AREA IS FOR BARENTS SEA.MAP AREAS:

A	-1:05,000,000	67N	032W, 53N	047E, 72N	074E, 51N 004W
B	-1:03,000,000	79N	010E, 74N	010E, 79N	040E, 74N 040E
C	-1:05,000,000	78N	010E, 66N	010E, 78N	070E, 66N 070E

(INFORMATION DATED 11/97)

Update 03/2000 - Current operational frequencies report as being 6446 and 8444 kHz (nights) and 7907 kHz (days).

Update 03/2000 - Broadcast schedule may no longer be transmitted on-air.

Update 03/2002 - May only be transmitting on 6446 kHz.

NORTHWOOD, UNITED KINGDOM

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
GYA	2618.5 kHz	At least 2 freq in use at any time	F3C	10 KW
GYA	4610 kHz	At least 2 freq in use at any time	F3C	10 KW
GYA	8040 kHz	At least 2 freq in use at any time	F3C	10 KW
GYA	11086.5 kHz	At least 2 freq in use at any time	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	SFC ANALYSIS	120/576	18/06	
0012/1212	SFC PRONOSIS T+24	120/576	18/06	
0024/1224	850MB WEBT/PPTN T+24	120/576	18/06	
0036/1236	OAT AND TD CONTOUR T+24	120/576	18/06	
0048/1248	SHIP ICE ACCRETION	120/576	12/00	
0100/130	MAIN SCHEDULE	120/576		
0124/1324	QSL REPORT	120/576		
0136/1336	OCEAN FRONTS	120/576		
0148/1348	300MB GPH	120/576		
0212/-----	SYMOLOGY	120/576	18/06	
-----/1400	SEA SURFACE TEMP T+12	120/576	0000	
0236/1436	SFC ANALYSIS	120/576	00/12	
0300/1500	SFC ANALYSIS	120/576	00/12	
0348/1548	GALE WARNING SUMMARY	120/576	04/16	
0400/1600	SFC ANALYSIS	120/576	00/12	
0412/1612	OAT AND TD CONTOUR T+24	120/576	00/12	
0424/1624	850MB WEBT/PPTN T+24	120/576	00/12	
0436/1636	SURFACE PROGNOSIS T+24	120/576	00/12	
0448/1648	SCEXA TAfs	120/576	06/18	
0500/1700	SFC ANALYSIS	120/576	00/12	
0512/1712	SURFACE PROGNOSIS T+24	120/576	00/12	
0524/1724	SURFACE PROGNOSIS T+48	120/576	00/12	
0536/1736	SCEXA TAfs	120/576	06/18	
0548/1748	GALE WARNING SUMMARY	120/576	06/18	
0600/1800	SFC ANALYSIS	120/576	00/12	
0612/1812	SURFACE PROGNOSIS T+24	120/576	00/12	
0624/1824	JMC T+12	120/576	00/12	
0636/1836	JMC T+24	120/576	00/12	
0648/1848	SCEXA TAfs	120/576	07/19	
0700/1900	SPARE SCEXA TAfs	120/576	07/19	
0712/1912	SIG WINDS T+24	120/576	00/12	
0724/1924	SFC PROGNOSIS T+48	120/576	00/12	
0736/1936	SFC PROGNOSIS T+72	120/576	00/12	
0748/1948	SFC PROGNOSIS T+96	120/576	00/12	
0800/2000	SFC PROGNOSIS T+120	120/576	00/12	
0812/2012	THICKNESS/GPH ANALYSIS	120/576	00/12	
0824/2024	SIG WINDS T+48	120/576	00/12	
0836/2036	SIG WINDS T+72	120/576	00/12	
0848/2048	SIG WINDS T+96	120/576	00/12	
0900/2100	SFC ANALYSIS	120/576	06/18	
0912/2112	THICKNESS/GPH ANALYSIS	120/576	00/12	
0924/2124	THICKNESS/GPH T+24	120/576	00/12	
0936/2136	850MB SPOT WINDS T+24	120/576	00/12	
0948/2148	700MB SPOT WINDS T+24	120/576	00/12	
1000/2200	SFC ANALYSIS	120/576	06/18	
1012/2212	SURFACE PROGNOSIS T+24	120/576	06/18	
1024/2224	REDUCED VIS T+24	120/576	06/18	
1036/2236	850MB WEBT/PPTN T+24	120/576	06/18	
1048/2248	OAT AND TD CONTOUR T+24	120/576	06/18	
1100/2300	SFC ANALYSIS	120/576	06/18	
1112/2312	SURFACE PROGNOSIS T+24	120/576	06/18	
1124/2324	SEA AND SWELL T+24	120/576	00/12	
1136/2336	THICKNESS/GPH T+24	120/576	00/12	
1148/2348	GALE WARNING SUMMARY	120/576		

All MAPS 54°N.82°W 26°N.45°W 54°N.51°E 28°N.12°E

(SCHEDULE EFFECTIVE 19 JAN 2005)

APPENDICES

NATIONAL WEATHER SERVICE MARINE PRODUCTS VIA INTERNET INCLUDING RADIOFAX

The Internet is **not** part of the National Weather Service's operational data stream and should never be relied upon as a means to obtain the latest forecast and warning data. Become familiar with and use other means such as NOAA Weather Radio to obtain the latest forecasts and warnings.

Note: Any reference to a commercial product or service does not imply any endorsement by the National Weather Service as to function or suitability for your purpose or environment.

The **Marine Forecasts** webpage contains information on the dissemination of U.S. National Weather Service marine products including radiofax such as frequency and scheduling information as well as links to products. The webpage may be found at:

<http://www.nws.noaa.gov/om/marine/home.htm>

Marine Text Forecasts and Products

The majority of National Weather Service (NWS) forecasts and warnings may be found under the **NWS webpage** (<http://www.nws.noaa.gov>). Of specific interest to mariners are **NWS Marine Text Forecasts and Products** (<http://www.nws.noaa.gov/om/marine//home.htm#text>) . For convenience, High Seas, Offshore and Coastal marine forecasts are subdivided by sea area or zone and available via the Internet using our text interface or graphic interface. **Individual NWS Forecast Offices and Centers** producing marine forecasts provide links to their products as well as additional regionally focused information (http://www.nws.noaa.gov/om/marine/marine_map.htm).

Marine Graphic Forecasts and Products

Graphic marine forecasts are produced by NWS for broadcast via radiofax and also made available via the Internet at Marine Radiofax Charts (<http://weather.noaa.gov/fax/marine.shtml>)

The National Weather Service also plans to make available marine forecast data in gridded and vector formats for display on electronic charts and use by other value-added applications. Graphics using these data are available via the Internet on an experimental basis for most U.S. coastal areas. See <http://www.nws.noaa.gov/om/marine/newsgridded.htm>

Also see **Computer Generated Model Guidance** below.

Satellite and RADAR Imagery

Satellite imagery may be found on the **GOES webpage** (<http://www.goes.noaa.gov/>) and is also available from **NASA** (<http://rsd.gsfc.nasa.gov/goes/>). Ocean surface winds and other data derived from polar orbiting and geostationary satellites may be found on **NOAA's Marine Observing Systems Team Homepage** (<http://manati.wwb.noaa.gov/doc/oppt.html>) and **NOAA's Coastwatch Homepage**. (<http://sgiot2.wwb.noaa.gov/COASTWATCH/>). Information and links to Sea Surface Temperature Charts and Gulf Stream charts may be found on our **FAQ webpage** (<http://www.nws.noaa.gov/om/marine/faq.htm>). **NEXRAD Doppler Radar images** (<http://weather.noaa.gov/radar/mosaic/DS.p19r0/ar.us.conus.shtml>) are available on the Internet on the **NWS Homepage** (<http://www.nws.noaa.gov>) and **local NWS Forecast Offices homepages** (http://www.nws.noaa.gov/om/marine/marine_map.htm). NEXRAD Doppler Radar images may also be found on local cable channels and the Internet webpages of local media including TV stations, radio stations and newspapers as well as others

Ice Analyses, Forecasts and Iceberg Reports

Ice analyses, forecasts and iceberg reports are available from the **National Ice Center** (<http://www.natice.noaa.gov/>) and the U.S. Coast Guard's **International Ice Patrol** (<http://www.uscg.mil/lantarea/iip/home.html>), and local NWS marine forecast offices in areas such as Alaska where ice is a concern. Ice forecasts and observations are also made available as radiofax, text products and computer generated model guidance.

Computer Generated Model Guidance

Computer generated model guidance products used by marine forecasters is available from the **Ocean Modeling Branch** (<http://polar.wwb.noaa.gov/>), the **Environmental Modeling Center** (<http://www.emc.ncep.noaa.gov/>), the **National Ocean Services's Chesapeake Bay Operational Forecast System** (<http://co-ops.nos.noaa.gov/CBOFS/cbofs.shtml>), and the **Great Lakes Forecasting System** (<http://superior.eng.ohio-state.edu/>).

The **Weather Charts webpage** (<http://weather.noaa.gov/fax/graph.shtml>) contains charts, intended as guidance to forecasters, which can prove of value to mariners.

Note: Several charts listed under "Weather Charts", which are no longer required to support NWS operations, may be terminated or made available at alternate sites. This should not include those which are broadcast by marine radiofacsimile.

Caution...these data have not been validated by marine forecasters and may be misleading. Mariners should use these data in conjunction with forecaster generated forecasts.

Marine Climatological Information

User-friendly climatological information for marine coastal areas may be found in **Appendix T of the National Ocean Service's Coast Pilot's, volumes 1-9** (<http://chartmaker.ncd.noaa.gov:80/nsd/cpdownload.htm>). These appendices, which were prepared by the **National Climatic Data Center** (<http://lwf.ncdc.noaa.gov/oa/ncdc.html>), also contain other useful meteorological information such as conversion tables. Visit their webpage for further information.

The National Geospatial-Intelligence Agency now makes available some of its Pilot Charts on-line (http://164.214.12.145/pubs/pubs_j_apc_list.html).

Foreign Marine Forecasts

Links to **foreign meteorological services** (<http://www.wmo.ch/web-en/member.html>) are available courtesy of the **World Meteorological Organization (WMO)** (<http://www.wmo.ch>).

The WMO also provides **links to marine webpages for member countries** (<http://www.wmo.ch/web/aom/marprog/links.html>).

The WMO also introduced a GMDSS Webpage which provides links to worldwide meteorological bulletins and warnings issued for high seas via SafetyNet (as a first step). See: <http://weather.gmdss.org/>

Buoy and Other Real-Time Observations

The latest coastal and offshore weather observations from NOAA fixed and drifting data buoys and Coastal-Marine Automated Network (C-MAN) stations may be found at the **National Data Buoy Center webpage** (<http://www.ndbc.noaa.gov>). Real time meteorological and oceanographic observations for several sites are also available from the **Physical Oceanographic Real-Time System (Ports)** (http://coops.nos.noaa.gov/d_ports.html). PORTS is a program of the U.S. **National Ocean Service** (<http://www.nos.noaa.gov>) that supports safe and cost-efficient navigation by providing ship masters and pilots with accurate real-time information required to avoid groundings and collisions. **Several National Ocean Service tide gages are also equipped with ancillary meteorological sensors** (<http://tidesonline.nos.noaa.gov/geographic.html>).

Regionally focused observation data may also be found on the webages of local NWS Forecast Offices. Some marine observations may also be found on our **NWS Marine Product Listing and Schedule** (<http://www.nws.noaa.gov/om/marine/forecast.htm>). Historical and real-time beach temperature data is available from the **NODC Coastal Water Temperature Guide** (<http://www.nodc.noaa.gov/dsdt/cwtg/>). A variety of marine observations may be viewed on the **National Ocean Service's nowCOAST WEb Portal(BETA)**, (<http://chartmaker.ncd.noaa.gov/csdl/op/nowcoast.htm>).

NOAA's Forecast Systems Laboratory (FSL) offers a Display of Surface Data (<http://www-frd.fsl.noaa.gov/mesonet/>) from several government, commercial and voluntarily operated mesonets as well as observations of those of the Voluntary Observing Ship (VOS) Program and data buoys. Among these mesonets, are **observing systems at several U.S. Coast Guard stations** (<http://uscg.instaweather.com/>) as part of the **Homeland Security WeatherNet Network** (http://www.aws.com/aws_2001/homeland/index.html) which is a public-private partnership between **AWS Convergence Technologies** (http://www.aws.com/aws_2001/default.asp) and NWS. A variety of marine observations may also be viewed on the **National Ocean Service's BETA nowCOAST Web Portal** (<http://chartmaker.ncd.noaa.gov/csd1/op/nowcoast.htm>).

For mariners with a low speed Internet connection..... The latest buoy or C-MAN data may be retrieved via the Internet as in the following example where 44017 refers to buoy #44017.

http://www.ndbc.noaa.gov/mini_station_page.phtml?station=44017

Tide Predictions, Observations and Storm Surge Forecasts

Near real-time **Water Level Observations, and Predicted Tide Information** <http://www.co-ops.nos.noaa.gov>) for the calendar year are available from the **National Ocean Service** (<http://www.nos.noaa.gov>). Read the **NOS Tides FAQ** (<http://www.co-ops.nos.noaa.gov/faq1.html>) for further information on obtaining NOS tides and tidal current data. *Caution is urged in using tide data made available at University and other webpages. This information may not be based on current government data and be of unknown quality.*

The National Weather Service's Cleveland Forecast Office makes available a series of **experimental Great Lakes Water Levels Graphs** (<http://marine.wcle.noaa.gov/levels.html>), using National Ocean Service data, intended to be low-speed-connection-friendly for Internet access by vessels afloat.

Experimental, computer generated, **Extratropical Water Level Forecasts** (<http://www.nws.noaa.gov/tdl/etsurge>) are available from the National Weather Service's **Meteorological Development Laboratory** (<http://www.nws.noaa.gov/tdl/>). Status maps are provided to give the user a quick overview of a region. Forecasts of storm surge produced as a result of a tropical storm or hurricane are available from **your local NWS Forecast Office** (http://www.nws.noaa.gov/om/marine/marine_map.htm).

The **National Ocean Service's Chesapeake Bay Operational Forecast System** (<http://co-ops.nos.noaa.gov/CBOFS/cbofs.shtml>) has been created by NOS to provide the maritime community with improved short-term predictions of water level in the Chesapeake Bay. *Please be advised that these predictions are based on a hydrodynamic model and, as such, should be considered as computer-generated forecast guidance.*

Historic Weather Forecasts, Satellite Images and Oceanographic Data

For historic weather forecasts, satellite images and oceanographic data, contact the National Climatic Data Center and National Oceanographic Data Center, found on **our listing of Phone Numbers and Addresses** (<http://www.nws.noaa.gov/om/marine/phone.htm>).

Voluntary Observations from Mariners

All NWS marine forecasts rely heavily on the **Voluntary Observing Ship (VOS)** program (<http://www.vos.noaa.gov/>) for obtaining meteorological observations. Ship observations may also be found on the **National Data Buoy Center - Observations Search** (http://www.ndbc.noaa.gov/obs_search.shtml), **National Data Buoy Center - Ships Observation Report** (http://www.ndbc.noaa.gov/ship_obs.phtml), **NOAA's Forecast Systems Laboratory (choose maritime)** (<http://www-frd.fsl.noaa.gov/mesonet/>), **Penn State** (<http://www.ems.psu.edu/cgi-bin/wx/offshore.cgi>), **Oceanweather** (<http://www.oceanweather.com/data/index.html>) and **Great Lakes Ship Locations** (<http://reef.atmos.colostate.edu/drummond/>)

The National Weather Service has a number of other volunteer observation programs including the SKYWARN, MAREP, MAROB, MARS, APRSWXNET/Citizen Weather Observer Program (CWOP) and the Cooperative Observer Program (COOP) which are of benefit to the marine community. See: <http://www.nws.noaa.gov/om/marine/voluntary.htm>

Marine Webpages

The Internet contains a great number of webpages of interest to the mariner. Visit our **Links webpage** (<http://www.nws.noaa.gov/om/marine/mlinks.htm>) for a listing of recommended webpages pertaining to Marine Weather. The **U.S. Coast Guard Maritime Telecommunications Information webpage** (<http://www.navcen.uscg.gov/marcomms>) contains an excellent description of marine communication systems. There are also many other Internet sites of interest to the mariner. Use one the Internet search engines to search on topics such as "marine weather", "radiofax", "radiofacsimile", "weather buoys", "tides", etc. The NOAA Library (<http://www.lib.noaa.gov>) provides an excellent listing of links to marine related webpages within NOAA and elsewhere

Marine Weather Publications On the Web

Many marine weather related government publications are available on the Web. Visit our **publications webpage** <http://www.nws.noaa.gov/om/marine/pub.htm>) for several we recommend including our popular Marine Service Charts, the Mariners Weather Log Magazine, and our listing of Worldwide Marine Radiofacsimile Broadcast Schedules (this publication).

Internet Access for Mariners

Internet at sea can be problematic unless you stay within cellular telephone range of shore. Internet access using cellular technology is technically challenging and potentially frustrating as well. Terrestrial wireless Internet services such as those provided by **GoAmerica** (www.goamerica.net), **Palm.Net** (<http://www.palm.com/products/palmvii/wireless.html>), **OmniSky** (www.omnisky.com/), **TeleSea** (<http://www.teleseawireless.net/>), **Motient** (<http://www.motient.com/>), **eHarbor** (www.eharbor.org) and **AlwaysOnline.net** (www.alwaysonline.net) are beginning to become available, however, these provide limited maritime coverage. These companies may employ "Marine WIFI" technology which is rapidly becoming popular at marinas and in favorite harbor areas. Satellite services including **Inmarsat** (www.inmarsat.org), **Iridium** (www.iridium.com), **Globalstar** (www.globalstarusa.com), **Thuraya** (www.thuraya.com), **Emsat** (www.eutelsat.com/products/2_4_2.html), **AceS** (www.acesinternational.com), **tracNet/DirecPC** (www.kvh.com/MarineSat/index.asp?flash=yes), **Mobile Satellite Ventures** (www.tmi.ca), **Boatracs** (www.boatracs.com, **Orbcomm** (www.orbcomm.com), **Digital Seas International**(<http://www.mtnsat.com/digitalseas.htm>), and **MTN** (www.mtnsat.com) are available, however, costs are generally greater.

Several companies offer e-mail services designed to optimize satellite connectivity including **MAILASAIL** (<http://www.mailasail.com>), **MarineNet** (<http://www.marinenet.net>), **OCENS** (http://www.ocens.com/cgi-bin/ocens_mail.pl?p=info), **Telaurus** (<http://www.telaurus.net>) and **UUPLUS** (<http://www.uuplus.com>). Full Internet access is often available if you have a satellite terminal onboard, but presently unless you restrict your use to e-mail messages, costs can be high. A number of satellite services such as Inmarsat-C offer e-mail messaging services only and provide no direct access to the World Wide Web. Several transmission and data compression schemes are available and in development to make the Web more accessible to the mariner. There are also several public FTP-to-EMAIL and WWW-to-EMAIL servers available to allow Internet access for users who do not have direct or cost effective access to the World Wide Web but who are equipped with an e-mail system. Visit <http://www.faqs.org/faqs/internet-services/access-via-email/> for information. Low cost, worldwide, access to the World Wide Web via satellite should be available to the mariner in the next five to ten years.

E-mail access is available offshore if you have an HF marine radio from companies such as **Sailmail** (www.sailmail.com), **SeaMail** (www.seamail.org), , **CruiseEmail** (www.cruiseemail.com/index.html), **MarineNet** (www.marinenet.net), Kielradio (www.kielradio.de/GB/Start_GB.htm), **Globe Wireless** (www.globewireless.com), **Mobile Marine Radio Network-WLO** (www.wlroradio.com). and **The Message Center** (<http://world.std.com/~msgctr/>). E-mail can be accomplished at no cost using amateur radio (<http://www.nws.noaa.gov/om/marine/ham.htm>).

The domain of the Internet is rapidly expanding to now include wireless devices such as so-called "Internet-Ready" digital cellular phones and Personal Data Assistants (PDAs). These offer great potential for making marine forecasts available to coastal mariners, who have limited other options available. The majority of these other options are by voice where there is always the possibility of misunderstanding. A PDA-friendly webpage for the most popular marine text forecasts may be found at <http://www.nws.noaa.gov/om/marinenewxi.htm>. Visit

<http://www.nhc.noaa.gov/aboutwap.shtml> where you will find NHC/TPC's wireless web page. There you can find the link to obtain NHC/TPC's most popular hurricane products, offshore forecasts, and high seas forecast, using your own Internet-ready phone, or use one of simulators for which a link is provided. Also visit the Miami Forecast Office's Wireless Access Page (<http://www.srh.noaa.gov/mfl/newpage/wireless.html>). A WAP webpage for offshore and coastal forecasts created by our Southern Region headquarters may be found at: www.srh.noaa.gov/wml (includes a capability to view forecast for any zip/city). Note....WAP/WML webpages require a WAP-capable cellphone or other WAP-capable device.

A number of Cellular service providers are beginning to offer value-added Internet-like services which provide access to NOAA tide data, marine forecasts, and other items of interest to the wireless customer. These require a digital phone with some of the more advanced features. See your Cellular service provider for details. There may be a nominal fee required for using these services. Examples of specific interest to the mariner include Ekkosoft's "SaltWater Tides" and "MarineWeather with marine411" (<http://www.ekkosoft.com/>)

National Weather Service Products Available Via E-MAIL (FTPMAIL)

National Weather Service marine text forecasts and radiofax charts are available via e-mail. Further, FTPMAIL may be used to acquire any file on a *.noaa.gov FTP server. The FTPMAIL server is intended to allow Internet access for mariners and other users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. Turnaround is generally in under one hour, however, performance may vary widely and receipt cannot be guaranteed. To get started in using the NWS FTPMAIL service, follow these simple directions to obtain the FTPMAIL "help" file (11 KBytes), or visit <http://weather.noaa.gov/pub/fax/ftpmail.txt>.

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body: help

The FTPMAIL "help", command and product index files are included in Appendix B of this document for convenience. Be certain to occasionally download these files to make certain you have the latest versions available.

An FAQ webpage describing several public and commercial FTP-to-EMAIL and WWW-to-EMAIL servers may be found at:

<http://www.faqs.org/faqs/internet-services/access-via-email/> .

A webpage describing several different e-mail "robots" similar in concept to FTPMAIL, including some with advanced features such as allowing retrieval of NWS marine GRIB files, simple webpages, and allowing products to be retrieved on a scheduled, recurring basis may be found at: <http://weather.noaa.gov/pub/fax/robots.txt>

National Hurricane Center Listserver

The National Hurricane Center operates an e-mail listserver which is special interest to mariners who do not have direct access to the World Wide Web but who are equipped with an e-mail system. This listserver provides an automated means to receive NWS hurricane forecast products via e-mail. However, performance may vary and receipt cannot be guaranteed. This is an experimental service. Interruptions or duplications in e-mail deliveries while we test the system are to be expected. Notices will be sent if any extended interruptions are encountered. See **instructions on using the NHC listserver** (<http://www.nhc.noaa.gov/signup.html>).

University of Illinois Listserver

The University of Illinois at Urbana-Champaign operates an **e-mail listserver** (<http://ralph.centerone.com/wxlist/>) of which two Lists, WX-ATLAN, and WX-TROPL are of special interest to mariners who do not have direct access to the World Wide Web but who are equipped with an e-mail system. These Lists provide an automated means to receive NWS hurricane forecast products via e-mail. However, performance may vary and receipt cannot be guaranteed. For **instructions on using the UIUC listserver** visit <http://weather.noaa.gov/pub/fax/uiuclist.txt>.

Internet Broadcasts

Marine weather data may also be obtained via the Internet using **EMWIN** (<http://www.nws.noaa.gov/om/marine/emwin.htm>). As part of the **New NOAA Weather Wire Service** (<http://www.nws.noaa.gov/om/marine/wxwire.htm>). **DynCorp** (<http://dynis.is.dyncorp.com/contracts/nwws/index.html>) broadcasts the entire Weather Wire product stream on the Internet as a commercial service.

Change Notices

For details on changes to NWS products, visit the Office of Climate, Water, and Weather Services Service Change Notifications (<http://www.nws.noaa.gov/om/notif.htm>), the **Data Product Change Management Database** (<http://www.nws.noaa.gov/oso/oso1/oso11/oso112/drg/drgrptc.htm>) and **Systems Operations Center Change Notices** (<http://www.nws.noaa.gov/oso/notices/notices.shtml>).

Directories of NWS Marine Forecasts

For Website developers or other "power" users, many NWS marine text forecast products are available at the following URL's, indexed by WMO header or zone.

<http://weather.noaa.gov/pub/data/forecasts/marine/>
<ftp://weather.noaa.gov/data/forecasts/marine/>
<http://weather.noaa.gov/pub/data/raw/>
<ftp://weather.noaa.gov/data/raw/>
<http://iwin.nws.noaa.gov/pub/data/text/>
<ftp://iwin.nws.noaa.gov/data/text/>
<http://iwin2.nws.noaa.gov/pub/data/text/>
<ftp://iwin2.nws.noaa.gov/data/text/>
<http://www.ndbc.noaa.gov/data/Forecasts/>
<http://asp1.sbs.ohio-state.edu/text/marine/>

Many National Weather Service Weather Charts may be found in the following directories, indexed by WMO ID or other identifier.

<http://weather.noaa.gov/pub/fax/>
<ftp://weather.noaa.gov/fax/>
<http://www.opc.ncep.noaa.gov/shtml/>

NATIONAL WEATHER SERVICE INTERNET SITES

NWS Homepage	http://www.nws.noaa.gov
NWS Marine Forecasts	http://www.nws.noaa.gov/om/marine/home.htm
NWS Marine Text Products	http://www.nws.noaa.gov/om/marine/home.htm#text
NWS Marine Radiofax Products	http://www.nws.noaa.gov/fax/marine.shtml
NWS Voluntary Observing Ship Program	http://www.vos.noaa.gov
AMVER/SEAS Homepage	http://seas.amverseas.noaa.gov/seas/

U.S. NAVY AND OTHER WEATHER INTERNET SITES

See these sites for further links

Naval Oceanographic Office	http://www.navo.navy.mil
Navy Fleet Numerical	https://www.fnmoc.navy.mil/
International Ice patrol	http://www.uscg.mil/lantarea/iip/home.html
National Ice Center	http://www.natice.noaa.gov
WMO Homepage	http://www.wmo.ch
JCOMM GMDSS	http://weather.gmdss.org/
USCG Maritime Telecommunications	http://www.navcen.uscg.gov/marcomms

FTPMAIL help file

*
*
*
* This is a United States Government Computer. Use of
* this computer for purposes for which authorization
* has not been extended is a violation of federal law.
*
*
* (Reference Public Law 99-474)
*
* For Help contact:
*
* Timothy.Rulon@noaa.gov 301-713-1677 x 128
* Clifford.Fridlind@noaa.gov 301-713-0882 x 122

***** NEW USERS....Read these notes on CAPITALIZATION *****

CORRECT CAPITALIZATION FOR COMMANDS, DIRECTORY AND FILE NAMES IS CRITICAL. FOLLOW THE EXAMPLES CLOSELY.

FTPMAIL e-mail requests must be sent in ASCII/Plain Text only.
HTML formatting will likely result in no response from the FTPMAIL server.

*.noaa.gov sites are the only valid FTP sites for this server

This National Weather Service (NWS) FTPMAIL server is intended to allow Internet access for users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. The service is free and no signup is required. Using FTPMAIL, users can request files from NWS and have them automatically e-mailed back to them. Turnaround is generally in under one hour, however, performance may vary widely and receipt cannot be guaranteed.

NOTICE - Check time and date of forecasts. Downloaded data may not represent the latest forecast. The Internet is not part of the National Weather Service's operational data stream and should never be relied upon as a means to obtain the latest forecast and warning data. Become familiar with and use other means such as NOAA Weather Radio to obtain the latest forecasts and warnings. Please read our disclaimer at <http://www.nws.noaa.gov/disclaimer.php>

Although these instructions are tailored for marine users to gain access to graphic(radiofax) and text products via e-mail, all publicly available data on any *.noaa.gov Internet FTP server is accessible using the FTPMAIL server.

To use **FTPMAIL**, the user sends a small script file via e-mail to NWS requesting the desired file(s). An error message will be returned if the script file is in error.

Users should be familiar with sending and receiving messages and attachments with their particular e-mail system. Attachments are received in UUencoded form. The majority of modern e-mail systems handle the conversion automatically, other users will need to run the UUdecode program for their particular system. See your system administrator if you have any questions on this.

topic. The UUencoding process can add 0 to >100% overhead depending on your system and the type of file.

Files sizes for NWS radiofax graphic files average 35KB but can be much greater. Users should be aware of the costs for operating their particular e-mail system before attempting to use FTPMAIL, especially when using satellite communication systems. For marine users, using FTPMAIL via INMARSAT-C for obtaining current NWS radiofax graphic files is cost prohibitive. Using the FTPMAIL compression feature of FTPMAIL is not recommended as these files are already in a compressed T4(G4) format enveloped in TIFF for viewing. You will need a graphics program capable of displaying files in this format in order to view them. Suggestions for TIFF viewers may be found in file <http://weather.noaa.gov/fax/rfaxtif.txt>

NEW! Radiofax .TIF files now also available as (larger) .gif files

The following examples demonstrate the use of FTPMAIL. Indexes of currently available marine products, the list FTPMAIL commands, and suggestions for TIFF viewers may be obtained following these instructions.

To use FTPMAIL:

- o Send an e-mail via the Internet to: ftpmail@weather.noaa.gov
- o Put anything you like on the subject line
- o Enter a command script in the body of the message

NOTE: Correct capitalization for commands, directory and file names is critical

Example scripts are:

```
help
```

Connect to default_site (weather.noaa.gov) and send back this help file to e-mail address of requestor

```
open
cd fax
get PWAE98.TIF
quit
```

Connect to default_site (weather.noaa.gov) and send back the chart file PWAE98.TIF to e-mail address of requestor

```
open
cd data
cd forecasts
cd marine
cd coastal
cd an
get anz231.txt
quit
```

Connect to default_site (weather.noaa.gov) and send back coastal marine zone forecast ANZ231 to e-mail address of requestor

```
open
cd data
cd forecasts
```

```
cd zone  
cd md  
get mdz009.txt  
quit
```

Connect to default_site (weather.noaa.gov) and send back public land zone forecast MDZ009 to e-mail address of requestor.
(Contact your local forecast office to identify the public forecast zone number for your county, known as the UGC code)

```
reply-to captain.kidd@noaa.gov  
open  
dir  
quit
```

Connect to default_site (weather.noaa.gov) and send back the contents of the top level directory to captain.kidd@noaa.gov

```
open www.ndbc.noaa.gov  
cd data  
cd latest_obs  
get 42007.txt  
get gdill1.txt  
quit
```

Connect to the National Data Buoy Center's FTP server and send back the latest observations for buoy #42007 and C-MAN station GDILL1

```
open  
cd fax  
get ftpcmd.txt      (List of FTPMAIL commands)  
get rfaxtif.txt     (TIFF suggestions)  
get rfaxatl.txt     (Atlantic radiofax file directory)  
get rfaxpac.txt     (Pacific radiofax file directory)  
get rfaxmex.txt     (Gulf of Mexico and Trop Atl radiofax file dir)  
get rfaxak.txt      (Alaska radiofax and ice file directory)  
get rfaxhi.txt      (Hawaii radiofax file directory)  
get otherfax.txt    (Foreign charts file directory)  
get marine1.txt     (Highseas,Offshore,Open Lakes,NAVTEX text file dir)  
get marine2.txt     (Hurricane text file directory)  
get marine3.txt     (Coastal forecasts text file directory)  
get marine4.txt     (Offshore forecasts by zone directory)  
get marine5.txt     (Atlantic coastal forecasts by zone directory)  
get marine6.txt     (Pacific coastal forecasts by zone directory)  
get marine7.txt     (Gulf of Mexico coastal forecasts by zone dir)  
get marine8.txt     (Great Lakes coastal forecasts by zone directory)  
get marine9.txt     (Alaska coastal forecasts by zone directory)  
get marine10.txt    (Hawaii&Trust coastal forecasts by zone directory)  
get uk.txt          (UK marine forecasts from Bracknell directory)  
get canada.txt     (Canadian marine text forecast directory)  
get buoydata.txt    (Buoy and C-MAN data directory)  
get robots.txt      (Marine forecasts via e-mail systems)  
quit
```

Connect to default_site (weather.noaa.gov) and send back the requested files to e-mail address of requestor.

Many, but not all National Weather Service forecast products may be obtained using FTPMAIL if the WMO/AWIPS Header is known as follows. Be aware that several NWS products share WMO headers so the desired forecast may be overwritten at times by another product.

Example:

To obtain the Atlantic high seas Forecast, WMO header FZNT01 KWBC,
AWIPS HEADER HSFAT1

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body:
open iwin.nws.noaa.gov
cd data
cd text
cd FZNT01
get KWBC.TXT
quit

or

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body:
open
cd data
cd raw
cd fz
get fznt01.kwbc.hsf.atl.txt
quit

*****SPECIAL NOTES*****

CORRECT CAPITALIZATION FOR COMMANDS, DIRECTORY AND FILE NAMES IS CRITICAL. FOLLOW THE EXAMPLES CLOSELY.

FTPMAIL e-mail requests must be sent in ASCII/Plain Text only. HTML formatting will likely result in no response from the FTPMAIL server.

Problems have recently been reported by users of Hotmail. If you are a Hotmail user and are using the system successfully, please notify us of and your experiences and any workarounds you may have developed.

If you restrict incoming e-mail as a means of preventing spam, you must program your e-mail system to allow messages from:
ftpmail@tgsv22.nws.noaa.gov, ftpmail@tgsv23.nws.noaa.gov,
ftpmail@tgsv24.nws.noaa.gov, ftpmail@tgsv25.nws.noaa.gov

The majority of error messages have been disabled. You may or may not receive an error message back from FTPMAIL if your script is in error.

FTPMAIL problems are occasionally encountered when embedded control characters are received within the e-mail message received by the FTPMAIL server. These control characters may be introduced by the user's e-mail system and may be unavoidable. We are working to develop a version of FTPMAIL which parses these control characters.

Also be certain that each of your commands is not followed by any trailing space(s) or you will see an error message with a number of statements saying "=20"

Problems may also be encountered in trying to go down several levels of directories simultaneously, e.g. "cd data/forecasts/marine/test".

Use a series of commands "cd data", "cd forecasts", "cd marine" instead.

In both these instances, the likely error will be "Directory not Found"

If the FTPMAIL server is too busy, you will receive an e-mail with a subject line similar to: "ftpmail job queuing for retry queue/097095.69568" Your request will be resubmitted automatically and your requested file(s) should be received within several hours.

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

<http://www.nws.noaa.gov> NWS Homepage
<http://www.nws.noaa.gov/om/marine/home.htm> NWS Marine Page

An FAQ webpage describing several public and commercial FTP-to-EMAIL and WWW-to-EMAIL servers may be found at:
www.faqs.org/faqs/internet-services/access-via-email/

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified October 15, 2004
Document URL: <http://weather.noaa.gov/pub/fax/ftpmail.txt>
<ftp://weather.noaa.gov/fax/ftpmail.txt>

FTPMAIL commands for ftpmail@weather.noaa.gov FTPMAIL server

FTP's files and sends them back via electronic mail

NOTE: *.noaa.gov are the only valid FTP sites for this FTPMAIL server.

NOTE: Capitalization is critical for this server. Commands are un-capitalized, while some directory and file names are CAPITALIZED, while others are un-capitalized.

To use FTPMAIL:

- o Send an E-mail via the Internet to ftpmail@weather.noaa.gov
- o Put anything you like on the subject line
- o Enter a command script in the body of the message

Example scripts are:

```
reply-to lmjm@server.big.ac.uk
```

```
open
```

```
dir
```

```
quit
```

Connect to default_site (weather.noaa.gov) and send back the contents of the top level directory to lmjm@server.big.ac.uk

```
open
```

```
cd fax
```

```
get PWAG01.TIF
```

```
quit
```

Connect to default_site (weather.noaa.gov) and send back the chart file PWAG01.TIF to e-mail address of requestor

>>Valid commands to the ftpmail gateway are:

reply-to email-address Who to send the response to. This is optional and defaults to the users email address

>>Followed by one of:

help Just send back help

delete jobid Delete the given job
(jobid is received from server)

open [site [user [pass]]] Site to ftp to. Default is:

default_site anonymous reply-to-address.

>>If there was an open then it can be followed by up to 100 of the >>following commands

cd pathname Change directory.

cd .. Move up 1 directory.
cd / Move to the root directory.

ls [pathname] Short listing of pathname.
Default pathname is current directory.

dir [pathname] Long listing of pathname.
Default pathname is current directory.

get pathname Get a file and email it back.

compress Compress files/dir-listings before emailing back

gzip Gzip files/dir-listings before emailing back

uuencode btoa These are mutually exclusive options for
converting a binary file before emailing.
(Default is uuencode.)

force uuencode Force all files or directory listings to
be encoded before sending back.
There is no default.

force btoa

mime Send the message as a Mime Version 1.0 message.
Text will be sent as text/plain charset=US-ASCII
Non-text as application/octet-stream.
If the file is splitup then it will be sent
as a message/partial.

force mime As mime but force text files to be sent as
application/octet-stream

no [compress|gzip|uuencode|btoa|mime]
Turn the option off.

size num[K|M] Set the max size a file can be before it
is split up and emailed back in parts to
the given number of Kilo or Mega bytes.
This is limited to 275KB. Default is 275KB.

mode binary Change the mode selected for the get
command. Defaults to binary.

mode ascii

quit End of input - ignore any following lines.

Author: Timothy Rulon, Office of Meteorology, National Weather Service
Last Modified August 01, 2003
Document URL: <http://weather.noaa.gov/pub/fax/ftpcmd.txt>
<ftp://weather.noaa.gov/fax/ftpcmd.txt>

Suggested TIFF Viewers

The (G4)/TIFF format is used because the facsimile charts are in BLACK & WHITE and other encoding formats generate significantly larger files. The suggested TIFF viewers listed here are to help in your selection and have been found to work in viewing these charts in past testing. The viewers and sources listed imply no endorsement by the NWS.

Commercial Viewers for DOS/Windows 3.1

HyperFax.111 by Hypersoft	(603) 356-0210
Viewdirector by TMS, Inc.	(800) 944-7654
Imagehandler by LeadTools	(800) 637-4699
Keyview by FTP Software	(800) 242-4FTP
Snowview Platinum by Snowbound Software	(617) 630-9495

Shareware viewers for DOS/Windows 3.1

Paint Shop Pro 3.0 by Jasc, Inc. (612) 930-9171
Graphic Workshop v1.1p
VIDVUE v1.1 by L. Gozum
QuickView v1.2e (limited - can't rotate)

Shareware viewers for OS/2

PMJPEG
PMView v0.9

Shareware viewer for Apple/MAC

GraphicConverter 2.6

Author: Timothy Rulon, Office of Meteorology, National Weather Service

Last Modified Tuesday, 14-JAN-97, 10:17:34

Document URL: <http://tgsv5.nws.noaa.gov/pub/fax/rfaxtif.txt>

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Western Atlantic Ocean

U.S. Coast Guard Communications Station NMF - Boston, Massachusetts

Assigned frequencies 4235.0, 6340.5, 9110, 12750 kHz

Select a carrier frequency 1.9 kHz below those listed when using a single sideband radio in the USB mode to receive these broadcasts.

The latest version of marine weather charts for broadcast by the U.S. Coast Guard are available from the National Weather Service Telecommunication Gateway on this server. The listed charts are in the G4(T4) format and enveloped in TIFF for viewing. These charts may be found in directory:
<ftp://weather.noaa.gov/fax> or <http://weather.noaa.gov/pub/fax>

.TIF files now also available as .gif files

		FILE	NAME
WIND/SEAS CHARTS			
12Z	Sea State Analysis, 10E-95W Northern Hemisphere		PJAA99.TIF
00Z	Sea State Analysis, 45W-85W Northern Hemisphere		PWAA88.TIF
12Z	Sea State Analysis, 45W-85W Northern Hemisphere		PWAA89.TIF
	Sea State Analysis, (Most Current)		PWAA90.TIF
24HR	Wind/Wave Chart VT00Z Forecast 45W-85W N. Hemisphere		PWAE98.TIF
24HR	Wind/Wave Chart VT12Z Forecast 45W-85W N. Hemisphere		PWAE99.TIF
24HR	Wind/Wave Chart Forecast (Most Current)		PWAE10.TIF
48HR	Wind/Wave VT00Z Forecast 10E-95W Northern Hemisphere		PJAI98.TIF
48HR	Wind/Wave VT12Z Forecast 10E-95W Northern Hemisphere		PJAI99.TIF
48HR	Wind/Wave Chart Forecast (Most Current)		PJAI10.TIF
48HR	Wave Period VT00Z Forecast 10E-95W Northern Hemisphere		PJAI88.TIF
48HR	Wave Period VT12Z Forecast 10E-95W Northern Hemisphere		PJAI89.TIF
48HR	Wave Period Chart Forecast (Most Current)		PJAI20.TIF
96HR	Wind/Wave Chart VT12Z Forecast 10E-95W N. Hemisphere		PJAM98.TIF
96HR	Wave Period VT12Z Forecast 10E-95W N. Hemisphere		PJAM88.TIF

SURFACE CHARTS

00Z	Preliminary Surface Chart Analysis 45W-85W N. Hemisphere		PYAA10.TIF
06Z	Preliminary Surface Chart Analysis 45W-85W N. Hemisphere		PYAB01.TIF
12Z	Preliminary Surface Chart Analysis 45W-85W N. Hemisphere		PYAC01.TIF
18Z	Preliminary Surface Chart Analysis 45W-85W N. Hemisphere		PYAD01.TIF
	Preliminary Surface Chart Analysis (Most Current)		PYAD10.TIF
00Z	Surface Analysis Chart, Part 1, 10E-45W N. Hemisphere		PYAA01.TIF
00Z	Surface Analysis Chart, Part 2, 40W-95W N. Hemisphere		PYAA02.TIF
06Z	Surface Analysis Chart, Part 1, 10E-45W N. Hemisphere		PYAA03.TIF
06Z	Surface Analysis Chart, Part 2, 40W-95W N. Hemisphere		PYAA04.TIF
12Z	Surface Analysis Chart, Part 1, 10E-45W N. Hemisphere		PYAA05.TIF
12Z	Surface Analysis Chart, Part 2, 40W-95W N. Hemisphere		PYAA06.TIF
18Z	Surface Analysis Chart, Part 1, 10E-45W N. Hemisphere		PYAA07.TIF
18Z	Surface Analysis Chart, Part 2, 40W-95W N. Hemisphere		PYAA08.TIF
	Surface Analysis Chart, Part 1, (Most Current)		PYAA11.TIF
	Surface Analysis Chart, Part 2, (Most Current)		PYAA12.TIF
24HR	Surface Chart VT00Z Forecast 45W-85W Northern Hemisphere		PPAE00.TIF
24HR	Surface Chart VT12Z Forecast 45W-85W Northern Hemisphere		PPAE01.TIF
24HR	Surface Chart Forecast (Most Current)		PPAE10.TIF
48HR	Surface Chart VT00Z Forecast 10E-95W Northern Hemisphere		QDTM85.TIF
48HR	Surface Chart VT12Z Forecast 10E-95W Northern Hemisphere		QDTM86.TIF
48HR	Surface Chart Forecast (Most Current)		QDTM10.TIF

96HR Surface Chart VT12Z Forecast 10E-95W Northern Hemisphere PWAM99.TIF

UPPER AIR CHARTS

00Z 500MB Surface Chart Analysis 10E-95W Northern Hemisphere	PPAA50.TIF
12Z 500MB Surface Chart Analysis 10E-95W Northern Hemisphere	PPAA51.TIF
500MB Surface Chart Analysis (Most Current)	PPAA10.TIF
24HR 500MB Chart VT00Z Forecast 45W-85W Northern Hemisphere	PPAE50.TIF
24HR 500MB Chart VT12Z Forecast 45W-85W Northern Hemisphere	PPAE51.TIF
24HR 500MB Chart Forecast (Most Current)	PPAE11.TIF
36HR 500MB Chart VT00Z Forecast 10E-95W Northern Hemisphere	PPAG50.TIF
36HR 500MB Chart VT12Z Forecast 10E-95W Northern Hemisphere	PPAG51.TIF
36HR 500MB Chart Forecast (Most Current)	PPAG11.TIF
48HR 500MB Chart VT00Z Forecast 10E-95W Northern Hemisphere	PPAI50.TIF
48HR 500MB Chart VT12Z Forecast 10E-95W Northern Hemisphere	PPAI51.TIF
48HR 500MB Chart Forecast (Most Current)	PPAI10.TIF
96HR 500MB Chart VT12Z Forecast 10E-95W Northern Hemisphere	PPAM50.TIF

TROPICAL CYCLONE CHARTS

Tropical Cyclone Danger Area* VT03, 05N-60N, 00W-100W;	PWEK89.TIF
Tropical Cyclone Danger Area* VT09, 05N-60N, 00W-100W;	PWEK90.TIF
Tropical Cyclone Danger Area* VT15, 05N-60N, 00W-100W;	PWEK91.TIF
Tropical Cyclone Danger Area* VT21, 05N-60N, 00W-100W;	PWEK88.TIF
Tropical Cyclone Danger Area* (Most Current);	PWEK11.TIF

SATELLITE IMAGERY

00Z GOES Infrared	evnt00.jpg
06Z GOES Infrared	evnt06.jpg
12Z GOES Infrared	evnt12.jpg
18Z GOES Infrared	evnt18.jpg
GOES Infrared (Most Current)	evnt99.jpg

ICE CHARTS

Ice Chart (When Available) PIEA88.TIF
(Ice chart normally not available on this server see:
<http://www.uscg.mil/lantarea/iip/home.html>)

SCHEDULE INFORMATION

Radiofax Schedule Part 1 (Boston, MA)	PLAZ01.TIF
Radiofax Schedule Part 2 (Boston, MA)	PLAZ02.TIF
Radiofax Schedule (DOS Text Version)	hfmarsh.txt
Request for Comments	PLAZ03.TIF
Product Notice Bulletin	PLAZ04.TIF
Test Pattern	PZZZ94.TIF
Internet File Names (This file)	rfaxatl.txt

Further information see: <http://www.nws.noaa.gov/om/marine/home.htm>

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified Oct 05, 2005
Document URL: <http://weather.noaa.gov/pub/fax/rfaxatl.txt>
<ftp://weather.noaa.gov/fax/rfaxatl.txt>

NATIONAL WEATHER SERVICE RADIOPHAX PRODUCTS
for the Eastern Pacific Ocean

U.S. Coast Guard Communications Station NMC - Point Reyes, CA

Assigned frequencies 4346, 8682, 12786, 17151.2, 22527 kHz

Select a carrier frequency 1.9 kHz below those listed when using a single sideband radio in the USB mode to receive these broadcasts.

The latest version of marine weather charts for broadcast by the U.S. Coast Guard are available from the National Weather Service Telecommunication Gateway on this server. The listed charts are in the G4(T4) format and enveloped in TIFF for viewing. Satellite images are in JPEG format. These charts may be found in directory: <ftp://weather.noaa.gov/fax> or <http://weather.noaa.gov/pub/fax>

For information of how these files and other text and graphic marine forecasts may be downloaded via e-mail (FTPMAIL) see:
<http://weather.noaa.gov/pub/fax/ftpmail.txt>

.TIF files now also available as .gif files

This file is intended to assist mariners using the FTPMAIL system which is used to obtain National Weather Service products via e-mail. The following is an example in the use of the FTPMAIL system.

PAY ATTENTION TO CAPITALIZATION:

Example using FTPMAIL:

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body:
open
cd fax
get PWBE10.TIF
get PWBM99.gif
quit

The "help" file contains a more detailed description of the FTPMAIL system and available products. To obtain a copy of the FTPMAIL "help file".

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: help

	FILE NAME
WIND/WAVE CHARTS	
00Z Sea State Analysis 20N-70N, 115W-135E	PJBA99.TIF
@00Z Sea State Analysis 25N-60N, E OF 155W	PWBA88.TIF
06Z Sea State Analysis 25N-60N, E OF 155W	PWBB88.TIF
12Z Sea State Analysis 25N-60N, E OF 155W	PWBA89.TIF
18Z Sea State Analysis 25N-60N, E OF 155W Sea State Analysis 25N-60N, E OF 155W (Most Current)	PWBD89.TIF PWBA90.TIF
24HR Wind/Wave Forecast VT00Z 25N-60N, E of 155W	PWBE98.TIF
24HR Wind/Wave Forecast VT12Z 25N-60N, E of 155W	PWBE99.TIF
24HR Wind/Wave Forecast (Most Current)	PWBE10.TIF
48HR Wind/Wave Forecast VT00Z 20N-70N, 115W-135E	PJBI98.TIF
48HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBI99.TIF

48HR Wind Wave Forecast (Most Current)	PJBI10.TIF
48HR Wave Period/Swell Direction VT00Z 20N-70N, 115W-135E	PJBI88.TIF
48HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBI89.TIF
48HR Wave Period/Swell Direction (Most Current)	PJBI20.TIF
96HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBM98.TIF
96HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBM88.TIF

TROPICAL WIND/WAVE CHARTS

Tropical Sea State Analysis VT00Z 30N-20S, E of 145W	PKFA88.TIF
Tropical Sea State Analysis VT12Z 30N-20S, E of 145W	PKFA89.TIF
Tropical Sea State Analysis (Most Current)	PKFA10.TIF
24HR Wind/Wave Forecast VT00Z 30N-20S, E of 145W	PWFE01.TIF
24HR Wind/Wave Forecast VT06Z 30N-20S, E of 145W	PWFE02.TIF
24HR Wind/Wave Forecast VT12Z 30N-20S, E of 145W	PWFE03.TIF
24HR Wind/Wave Forecast VT18Z 30N-20S, E of 145W	PWFE04.TIF
24HR Wind/Wave Forecast (Most Current)	PWFE10.TIF
48HR Wind/Wave Forecast VT00Z 30N-20S, E of 145W	PWFI88.TIF
48HR Wind/Wave Forecast VT12Z 30N-20S, E of 145W	PWFI90.TIF
48HR Wind/Wave Forecast (Most Current)	PWFI10.TIF
48HR Wave Period/Swell Direction VT00Z 30N-20S, E of 145W	PJFI87.TIF
48HR Wave Period/Swell Direction VT12Z 30N-20S, E of 145W	PJFI88.TIF
48HR Wave Period/Swell Direction (Most Current)	PJFI11.TIF
72HR Wind/Wave Forecast VT00Z 30N-20S, E of 145W	PWFK92.TIF
72HR Wind/Wave Forecast VT12Z 30N-20S, E of 145W	PWFK93.TIF
72HR Wind/Wave Forecast (Most Current)	PWFK10.TIF
72HR Wave Period/Swell Direction VT00Z 30N-20S, E of 145W	PJFK93.TIF

UPPER AIR CHARTS

00Z 500 MB Analysis 20N-70N 115W-135E	PPBA50.TIF
12Z 500 MB Analysis 20N-70N, 115W-135E	PPBA51.TIF
500 MB Analysis (Most Current)	PPBA10.TIF
24HR 500 MB Forecast VT00Z 20N-70N, 115W-135E	PPBE50.TIF
24HR 500 MB Forecast VT12Z 20N-70N, 115W-135E	PPBE51.TIF
24HR 500 MB Forecast (Most Current)	PPBE11.TIF
48HR 500 MB Forecast VT00Z 20N-70N, 115W-135E	PPBI50.TIF
48HR 500 MB Forecast VT12Z 20N-70N, 115W-135E	PPBI51.TIF
48HR 500 MB Forecast (Most Current)	PPBI10.TIF
96HR 500 MB VT12Z 20N-70N, 115W-135E	PPBM50.TIF

SURFACE CHARTS

00Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA01.TIF
00Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA02.TIF
06Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA03.TIF
06Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA04.TIF
12Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA05.TIF
12Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA06.TIF
18Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA07.TIF
18Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA08.TIF
Surface Analysis, Part 1 (Most Current)	PYBA90.TIF
Surface Analysis, Part 2 (Most Current)	PYBA91.TIF
24HR Surface Forecast VT00Z Forecast 25N-60W, E of 155W	PPBE00.TIF
24HR Surface Forecast VT12Z Forecast 25N-60W, E of 155W	PPBE01.TIF
24HR Surface Forecast (Most Current)	PPBE10.TIF
48HR Surface Forecast VT00Z 20N-70W, 115W-135E	PWBI98.TIF
48HR Surface Forecast VT12Z 20N-70W, 115W-135E	PWBI99.TIF
48HR Surface Forecast (Most Current)	PWBI10.TIF

TROPICAL SURFACE CHARTS

00Z Tropical Surface Analysis 30N-20S, E of 145W	PYFA96.TIF
06Z Tropical Surface Analysis 30N-20S, E of 145W	PYFA97.TIF
12Z Tropical Surface Analysis 30N-20S, E of 145W	PYFA98.TIF
18Z Tropical Surface Analysis 30N-20S, E of 145W	PYFA99.TIF
Tropical Surface Analysis Most Current	PYFA90.TIF
@00Z U.S./Tropical Surface Analysis (W Half) 5S-50N,55W-125W;	PYEB86.TIF
@06Z U.S./Tropical Surface Analysis (W Half) 5S-50N,55W-125W;	PYEB87.TIF
@12Z U.S./Tropical Surface Analysis (W Half) 5S-50N,55W-125W;	PYEB85.TIF
@18Z U.S./Tropical Surface Analysis (W Half) 5S-50N,55W-125W;	PYEB88.TIF
@ U.S./Tropical Surface Analysis (W Half) (Most Current);	PYEB11.TIF
@24HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W;	PYFE79.TIF
@24HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W;	PYFE80.TIF
@24HR Tropical Surface Forecast(Most Current);	PYFE10.TIF
@48HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W;	PYFI81.TIF
@48HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W;	PYFI82.TIF
@48HR Tropical Surface Forecast(Most Current);	PYFI10.TIF
@72HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W;	PYFK83.TIF
@72HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W;	PYFK84.TIF
@72HR Tropical Surface Forecast (Most Current);	PYFK10.TIF

TROPICAL CYCLONE CHARTS

72 HR Tropical Cyclone Danger Area VT 03Z 0N-40N, 80W-180W	PWFK88.TIF
72 HR Tropical Cyclone Danger Area VT 09Z 0N-40N, 80W-180W	PWFK89.TIF
72 HR Tropical Cyclone Danger Area VT 15Z 0N-40N, 80W-180W	PWFK90.TIF
72 HR Tropical Cyclone Danger Area VT 21Z 0N-40N, 80W-180W	PWFK91.TIF
72 HR Tropical Cyclone Danger Area (Most Current)	PWFK11.TIF

Note: Tropical Cyclone Danger Area chart replaced by High Wind/Wave Warning chart Dec 01 - May 14.

SEA SURFACE TEMPERATURES

Pacific SST Chart 40N-53N, E of 136W	PTBA88.TIF
Pacific SST Chart 23N-42N, E of 136W	PTBA89.TIF

SATELLITE IMAGERY

00Z GOES IR Satellite Image, Tropical East Pacific	evpn02.jpg
06Z GOES IR Satellite Image, Tropical East Pacific	evpn07.jpg
12Z GOES IR Satellite Image, Tropical East Pacific	evpn04.jpg
18Z GOES IR Satellite Image, Tropical East Pacific	evpn08.jpg
GOES IR Satellite Image, Tropical East Pac (MOST CURRENT)	evpn10.jpg
00Z GOES IR Satellite Image, East Pacific	evpn00.jpg
06Z GOES IR Satellite Image, East Pacific	evpn03.jpg
12Z GOES IR Satellite Image, East Pacific	evpn13.jpg
18Z GOES IR Satellite Image, East Pacific	evpn14.jpg
GOES IR Satellite Image, East Pacific (MOST CURRENT)	evpn98.jpg
00Z GOES IR Satellite Image, Pacific	evpn01.jpg
06Z GOES IR Satellite Image, Pacific	evpn06.jpg
12Z GOES IR Satellite Image, Pacific	evpn12.jpg
18Z GOES IR Satellite Image, Pacific	evpn18.jpg
GOES IR Satellite Image, Pacific (MOST CURRENT)	evpn99.jpg

SCHEDULE INFORMATION

Radiofax Schedule Part 1 (Point Reyes, CA)	PLBZ01.TIF
Radiofax Schedule Part 2 (Point Reyes, CA)	PLBZ02.TIF
Radiofax Schedule (DOS Text Format)	hfreyes.txt
Request for Comments	PLBZ03.TIF
Product Notice Bulletin	PLBZ04.TIF
Test Pattern	PZZZ93.TIF
Internet File Names (This file)	rfaxpac.txt

@ Not transmitted via Pt. Reyes radiofax but listed here for convenience

Further information see: <http://www.nws.noaa.gov/om/marine/home.htm>

Author: Tim Rulon, NWS Marine And Coastal Weather Services Branch W/OS21
Last Modified June 23, 2005
Document URL: <http://weather.noaa.gov/pub/fax/rfaxpac.txt>
<ftp://weather.noaa.gov/fax/rfaxpac.txt>

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Gulf of Mexico, Caribbean, Tropical Atlantic and Tropical Pacific

U.S. Coast Guard Communications Station NMG - New Orleans, Louisiana

Assigned frequencies 4317.9, 8503.9 12789.9, 17146.4 kHz

Select a carrier frequency 1.9 kHz below those listed when using a single sideband radio in the USB mode to receive these broadcasts.

The latest version of marine weather charts for broadcast by the U.S. Coast Guard are available from the National Weather Service Telecommunication Gateway on this server. The listed charts are in the G4(T4) format and enveloped in TIFF for viewing. These charts may be found in directory:
<ftp://weather.noaa.gov/fax> or <http://weather.noaa.gov/pub/fax>

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<http://weather.noaa.gov/pub/fax/ftpmail.txt>

.TIF files now also available as .gif files

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PAY ATTENTION TO CAPITALIZATION:

Example using FTPMAIL:

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body:
open
cd fax
get PWEE11.TIF
get PYEA11.gif
quit

The "help" file contains a more detailed description of the FTPMAIL system and available products. To obtain a copy of the FTPMAIL "help file".

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: help

	FILE NAME
WIND/WAVE CHARTS	
00Z Sea State Analysis, 0N-31N, 35W-100W;	PJEA88.TIF
12Z Sea State Analysis, 0N-31N, 35W-100W;	PJEA90.TIF
Sea State Analysis (Most Current);	PJEA11.TIF
24HR Wind/Wave Forecast VT00, 0N-31N, 35W-100W;	PWEE89.TIF
24HR Wind/Wave Forecast VT06, 0N-31N, 35W-100W;	PWEE90.TIF
24HR Wind/Wave Forecast VT12, 0N-31N, 35W-100W;	PWEE91.TIF
24HR Wind/Wave Forecast VT18, 0N-31N, 35W-100W;	PWEE92.TIF
24HR Wind/Wave Forecast (Most Current);	PWEE11.TIF
48HR Wind/Wave Forecast VT00, 0N-31N, 35W-100W;	PWEI88.TIF
48HR Wind/Wave Forecast VT12, 0N-31N, 35W-100W;	PWEI89.TIF
48HR Wind/Wave Forecast (Most Current);	PWEI11.TIF

48HR Wave Period/Swell Dir Forecast VT12, 0N-31N, 35W-100W;	PJEI88.TIF
48HR Wave Period/Swell Dir Forecast VT00, 0N-31N, 35W-100W;	PJEI89.TIF
48HR Wave Period/Swell Direction Forecast (Most Current);	PJEI11.TIF
72HR Wind/Wave Forecast VT00, 0N-31N, 35W-100W;	PJEK88.TIF
72HR Wind/Wave Forecast VT12, 0N-31N, 35W-100W;	PJEK89.TIF
72HR Wind/Wave Forecast (Most Current);	PJEK11.TIF
72HR Wave Period/Swell Dir Forecast VT00, 0N-31N, 35W-100W;	PKEK88.TIF

SURFACE CHARTS

00Z U.S./Tropical Surface Analysis (W Half) 5S-50N, 55W-125W;	PYEB86.TIF
06Z U.S./Tropical Surface Analysis (W Half) 5S-50N, 55W-125W;	PYEB87.TIF
12Z U.S./Tropical Surface Analysis (W Half) 5S-50N, 55W-125W;	PYEB85.TIF
18Z U.S./Tropical Surface Analysis (W Half) 5S-50N, 55W-125W; U.S./Tropical Surface Analysis (W Half) (Most Current);	PYEB88.TIF
00Z Tropical Surface Analysis (E Half) 5S-50N, 0W-70W;	PYEA86.TIF
06Z Tropical Surface Analysis (E Half) 5S-50N, 0W-70W;	PYEA87.TIF
12Z Tropical Surface Analysis (E Half) 5S-50N, 0W-70W;	PYEA85.TIF
18Z Tropical Surface Analysis (E Half) 5S-50N, 0W-70W; Tropical Surface Analysis (E Half) (Most Current);	PYEA88.TIF
@24HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W;	PYFE79.TIF
@24HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W;	PYFE80.TIF
@24HR Tropical Surface Forecast(Most Current);	PYFE10.TIF
@48HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W;	PYFI81.TIF
@48HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W;	PYFI82.TIF
@48HR Tropical Surface Forecast(Most Current);	PYFI10.TIF
@72HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W;	PYFK83.TIF
@72HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W;	PYFK84.TIF
@72HR Tropical Surface Forecast (Most Current);	PYFK10.TIF
24HR Tropical Surface Forecast(E Half)VT00,00N-31N, 35W-100W;	PYEE79.TIF
24HR Tropical Surface Forecast(E Half)VT12,00N-31N, 35W-100W; Tropical Surface Forecast(Most Current);	PYEE80.TIF
48HR Tropical Surface Forecast(E Half)VT00,00N-31N, 35W-100W;	PYEI81.TIF
48HR Tropical Surface Forecast(E Half)VT12,00N-31N, 35W-100W; Tropical Surface Forecast(Most Current);	PYEI82.TIF
72HR Tropical Surface Forecast(E Half)VT00,00N-31N, 35W-100W;	PYEK83.TIF
72HR Tropical Surface Forecast(E Half)VT12,00N-31N, 35W-100W; Tropical Surface Forecast(Most Current);	PYEK84.TIF
	PYEK10.TIF

@ Not transmitted via New Orleans radiofax but listed here for convenience

TROPICAL CYCLONE CHARTS

Tropical Cyclone Danger Area* VT03, 05N-60N, 00W-100W;	PWEK89.TIF
Tropical Cyclone Danger Area* VT09, 05N-60N, 00W-100W;	PWEK90.TIF
Tropical Cyclone Danger Area* VT15, 05N-60N, 00W-100W;	PWEK91.TIF
Tropical Cyclone Danger Area* VT21, 05N-60N, 00W-100W;	PWEK88.TIF
Tropical Cyclone Danger Area* (Most Current);	PWEK11.TIF

HIGH SEAS FORECASTS

04Z High Seas Forecast 7N-31N, 35W-98W, In English;	PLEA86.TIF
10Z High Seas Forecast 7N-31N, 35W-98W, In English;	PLEA87.TIF
16Z High Seas Forecast 7N-31N, 35W-98W, In English;	PLEA89.TIF
22Z High Seas Forecast 7N-31N, 35W-98W, In English; High Seas Forecast (Most Current);	PLEA88.TIF
	PLEA10.TIF

SELLATELITE IMAGERY

0645Z GOES IR Satellite Image, 12S-44N, 28W-112W;	evst06.jpg
1145Z GOES IR Satellite Image, 12S-44N, 28W-112W;	evst12.jpg

1745Z GOES IR Satellite Image, 12S-44N, 28W-112W;	evst18.jpg
2345Z GOES IR Satellite Image, 12S-44N, 28W-112W;	evst00.jpg
GOES IR Satellite Image (Most Current);	evst99.jpg

SCHEDULE INFORMATION

Radiofax Schedule (New Orleans, LA);	PLEZ01.TIF
Radiofax Schedule (DOS Text Format);	hfgulf.txt
Request for Comments;	PLEZ02.TIF
Product Notice Bulletin;	PLEZ03.TIF
Test Chart;	PZZZ95.TIF
Internet File Names, (This file);	rfaxmex.txt

* Tropical Cyclone Danger Area chart replaced by High Wind/Wave Warning chart Dec 01 - May 15, valid times 00z, 06z, 12z and 18z,
05N - 40N, 35W - 100W

Further information see: <http://www.nws.noaa.gov/om/marine/home.htm>

Author: Tim Rulon, NWS Marine And Coastal Weather Services Branch, W/OS21
Last Modified Oct 05, 2005
Document URL: <http://weather.noaa.gov/pub/fax/rfaxmex.txt>
<ftp://weather.noaa.gov/pub/fax/rfaxmex.txt>

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for Alaska and the North Pacific

U.S. Coast Guard Communications Station NOJ - Kodiak, Alaska

Assigned frequencies 2054, 4298, 8459, 12412.5 kHz

Select a carrier frequency 1.9 kHz below those listed when using a single sideband radio in the USB mode to receive these broadcasts.

The latest version of marine weather charts for broadcast by the U.S. Coast Guard are available from the National Weather Service. These charts may be found in directories:

ftp://weather.noaa.gov/fax
or
ftp://inetsrv.arh.noaa.gov/pub/marfax/ (for files indicated by #)

For information of how these files and other text and graphic marine forecasts may be downloaded via e-mail (FTPMAIL) see:
<http://weather.noaa.gov/pub/fax/ftpmail.txt>

.TIF files now also available as .gif files

PAY ATTENTION TO CAPITALIZATION:

Example using FTPMAIL:

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body: open inetsrv.arh.noaa.gov
cd pub
cd marfax
get martab.gif
get sfcmmap00.gif
quit

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body: open
cd fax
get PJBI99.TIF
get PYBE10.gif
quit

The "help" file contains a more detailed description of the FTPMAIL system and available products. To obtain a copy of the FTPMAIL "help file".

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: help

WIND/WAVE CHARTS

00Z Sea State Analysis 20N-70N, 115W-135E

FILE
NAME

PJBA99.TIF

24HR Wind/Wave Forecast VT00Z 40N-70N, 115W-170E	PJBE88.TIF
24HR Wind/Wave Forecast VT12Z 40N-70N, 115W-170E	PJBE89.TIF
24HR Wind Wave Forecast (Most Current)	PJBE10.TIF
48HR Wind/Wave Forecast VT00Z 20N-70N, 115W-135E	PJBI98.TIF
48HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBI99.TIF
48HR Wind Wave Forecast (Most Current)	PJBI10.TIF
48HR Wave Period/Swell Direction VT00Z 20N-70N, 115W-135E	PJBI88.TIF
48HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBI89.TIF
48HR Wave Period/Swell Direction (Most Current)	PJBI20.TIF
96HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBM98.TIF
96HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBM88.TIF

SURFACE CHARTS

00Z Surface Analysis 40N-70N, 125W-150E	sfcmap00.gif#
06Z Surface Analysis 40N-70N, 125W-150E	sfcmap06.gif#
12Z Surface Analysis 40N-70N, 125W-150E	sfcmap12.gif#
18Z Surface Analysis 40N-70N, 125W-150E	sfcmap18.gif#
Surface Analysis (Most Current)	PYPA00.TIF
(Covers larger area than on-air broadcast)	
24HR Surface Chart Forecast VT00Z 40N-70N, 115W-170E	PYBE00.TIF
24HR Surface Chart Forecast VT12Z 40N-70N, 115W-170E	PYBE01.TIF
24HR Surface Chart Forecast (Most Current)	PYBE10.TIF
48HR Surface Chart Forecast VT00Z 20N-70N 115W-135E	PWBI99.TIF
48HR Surface Chart Forecast VT12Z 20N-70N 115W-135E	PWBI98.TIF
48HR Surface Chart Forecast (Most Current)	PWBI10.TIF
96HR Surface Chart Forecast VT12Z	PWBM99.TIF

UPPER AIR CHARTS

00Z 500 MB Analysis 20N-70N 115W-135E	PPBA50.TIF
12Z 500 MB Analysis 20N-70N, 115W-135E	PPBA51.TIF
500 MB Analysis (Most Current)	PPBA10.TIF
@24HR 500 MB Forecast VT00Z 20N-70N, 115W-135E	PPBE50.TIF
@24HR 500 MB Forecast VT12Z 20N-70N, 115W-135E	PPBE51.TIF
@24HR 500 MB Forecast (Most Current)	PPBE11.TIF
48HR 500 MB Forecast VT00Z 20N-70N, 115W-135E	PPBI50.TIF
48HR 500 MB Forecast VT12Z 20N-70N, 115W-135E	PPBI51.TIF
48HR 500 MB Forecast (Most Current)	PPBI10.TIF
96HR 500 MB VT12Z 20N-70N, 115W-135E	PPBM50.TIF

SEA SURFACE TEMPERATURES

Sea Surface Temperature Analysis 40N-60N, 125W - 160E	sst.gif#
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SATELLITE IMAGERY

00Z GOES IR Satellite Image, Pacific	evpn01.jpg
06Z GOES IR Satellite Image, Pacific	evpn06.jpg
12Z GOES IR Satellite Image, Pacific	evpn12.jpg
18Z GOES IR Satellite Image, Pacific	evpn18.jpg
GOES IR Satellite Image, Pacific (MOST CURRENT)	evpn99.jpg

ICE CHARTS

Sea Ice Analysis	PTCA89.TIF
5 Day Sea Ice Forecast	ICEF.GIF
Cook Inlet Sea Ice Analysis	COOKICE.GIF

OTHER PRODUCTS

AK Coastal Forecast Tables

martab.gif#

SCHEDULE INFORMATION and MISCELLANEOUS

Radiofax Schedule Kodiak, AK;

sched.gif#

Radiofax Schedule (DOS Text Version)

hfak.txt

Test Pattern;

xxxxxx.xxx

Radiofacsimile Symbols and Contractions

symbol.gif#

Internet File Names; (This file)

rfaxak.txt

@ Not transmitted via Kodiak radiofax but listed here for convenience

(Will be transmitted via radiofax after 6/015/05)

xxxxxx.xxx = Currently unavailable

Further information see: <http://www.nws.noaa.gov/om/marine/home.htm>

Author: Tim Rulon, NWS Marine And Coastal Weather Services Branch W/OS21

Last Modified Oct 05, 2005

Document URL: <http://weather.noaa.gov/pub/fax/rfaxak.txt>

<ftp://weather.noaa.gov/fax/rfaxak.txt>

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Central Pacific

NAVY Communications Station KVM-70 - Honolulu, Hawaii

Assigned frequencies 9982.5, 11090 and 16135 kHz

Select a carrier frequency 1.9 kHz below those listed when using a single sideband radio in the USB mode to receive these broadcasts.

The latest version of NWS marine weather charts for broadcast by the NAVY are available from the National Weather Service Telecommunication Gateway on this server. The listed charts are in the G4(T4) format and enveloped in TIFF for viewing. These charts may be found in directory:
<ftp://weather.noaa.gov/fax> or <http://weather.noaa.gov/pub/fax>

For information of how these files and other text and graphic marine forecasts may be downloaded via e-mail (FTPMAIL) see:

<http://weather.noaa.gov/pub/fax/ftpmail.txt>

xxxxxx (Not yet available from these directories)

.TIF files now also available as .gif files

This file is intended to assist mariners using the FTPMAIL system which is used to obtain National Weather Service products via e-mail. The following is an example in the use of the FTPMAIL system.

PAY ATTENTION TO CAPITALIZATION:

Example using FTPMAIL:

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body: open
cd fax
get PJBA90.TIF
get QDEQ99.gif
quit

The "help" file contains a more detailed description of the FTPMAIL system and available products. To obtain a copy of the FTPMAIL "help file".

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: help

WIND/WAVE CHARTS - PACIFIC	FILE NAME
18Z# Pacific Sea State Analysis 30N-30S 110W-130E	PJFD89.TIF
24HR# Pacific Sea State Forecast VT18Z 30N-30S 110W-130E	PWFE84.TIF
24HR Wind/Wave Forecast VT00Z 60N-35S, 110W-130E	QWBI99.TIF
48HR Wind/Wave Forecast VT00Z 60N-35S, 110W-130E	QWBQ99.TIF
@48HR# Pacific Sea State Forecast VT18Z 30N-30S 110W-130E	xxxxxx.TIF
@72HR# Pacific Sea State Forecast VT18Z 30N-30S 110W-130E	xxxxxx.TIF

Experimental

WIND/WAVE CHARTS - SE PACIFIC

@Tropical Sea State Analysis VT00Z 30N-20S, E of 145W	PKFA88.TIF
@Tropical Sea State Analysis VT12Z 30N-20S, E of 145W	PKFA89.TIF
@Tropical Sea State Analysis (Most Current)	PKFA10.TIF
24HR Wind/Wave Forecast VT00Z 30N-20S, E of 145W	PWFE01.TIF
24HR Wind/Wave Forecast VT06Z 30N-20S, E of 145W	PWFE02.TIF
24HR Wind/Wave Forecast VT12Z 30N-20S, E of 145W	PWFE03.TIF
24HR Wind/Wave Forecast VT18Z 30N-20S, E of 145W	PWFE04.TIF
24HR Wind/Wave Forecast (Most Current)	PWFE10.TIF
48HR Wind/Wave Forecast VT00Z 30N-20S, E of 145W	PWFI88.TIF
@48HR Wind/Wave Forecast VT12Z 30N-20S, E of 145W	PWFI90.TIF
48HR Wind/Wave Forecast (Most Current)	PWFI10.TIF
@48HR Wave Period/Swell Direction VT00Z 30N-20S,E of 145W	PJFI87.TIF
48HR Wave Period/Swell Direction VT12Z 30N-20S, E of 145W	PJFI88.TIF
48HR Wave Period/Swell Direction (Most Current)	PJFI11.TIF
@72HR Wind/Wave Forecast VT00Z 30N-20S, E of 145W	PWFK92.TIF
72HR Wind/Wave Forecast VT12Z 30N-20S, E of 145W	PWFK93.TIF
72HR Wind/Wave Forecast (Most Current)	PWFK10.TIF
72HR Wave Period/Swell Direction VT00Z 30N-20S,E of 145W	PJFK93.TIF

SURFACE CHARTS - PACIFIC

@00Z North Pacific Preliminary Analysis 80N-20N, 110W-110E	xxxxxx.TIF
@06Z North Pacific Preliminary Analysis 80N-20N, 110W-110E	xxxxxx.TIF
@12Z North Pacific Preliminary Analysis 80N-20N, 110W-110E	xxxxxx.TIF
@18Z North Pacific Preliminary Analysis 80N-20N, 110W-110E	xxxxxx.TIF
@ North Pacific Preliminary Analysis (Most Current)	PYPA00.TIF
00Z Pacific Streamline Analysis 30N-30S, 110W-130E	PWFA90.TIF
06Z Pacific Streamline Analysis 30N-30S, 110W-130E	PWFA91.TIF
12Z Pacific Streamline Analysis 30N-30S, 110W-130E	PWFA92.TIF
18Z Pacific Streamline Analysis 30N-30S, 110W-130E	PWFA93.TIF
Pacific Streamline Analysis (Most Current)	PWFA11.TIF
00Z North Pacific Surface Pressure Analysis 50N-EQ, 110W-130E	PPBA88.TIF
06Z North Pacific Surface Pressure Analysis 50N-EQ, 110W-130E	PPBA89.TIF
12Z North Pacific Surface Pressure Analysis 50N-EQ, 110W-130E	PPBA90.TIF
18Z North Pacific Surface Pressure Analysis 50N-EQ, 110W-130E	PPBA91.TIF
North Pacific Surface Pressure Analysis (Most Current)	PPBA11.TIF
00Z Tropical Surface Analysis 50N-30S, 100W-120E	xxxxxx.TIF
06Z Tropical Surface Analysis 50N-30S, 100W-120E	xxxxxx.TIF
12Z Tropical Surface Analysis 50N-30S, 100W-120E	xxxxxx.TIF
18Z Tropical Surface Analysis 50N-30S, 100W-120E	xxxxxx.TIF
Tropical Surface Analysis (Most Current)	QYFA99.TIF
03Z Significant Cloud Features 50N-30S, 110W-160E	PBFA99.TIF
15Z Significant Cloud Features 50N-30S, 110W-160E	PBFC99.TIF
Significant Cloud Features (Most Current)	PBFA11.TIF
@24HR Pacific Surface Forecast VT00Z 50N-30S 110W-130E	xxxxxx.TIF
@24HR Pacific Surface Forecast VT12Z 50N-30S 110W-130E	xxxxxx.TIF
@24HR Pacific Surface Forecast (Most Current)	xxxxxx.TIF
24HR Wind/Stream Forecast VT00Z 50N-30S, 100W-120E	QWFI99.TIF
48HR Wind/Stream Forecast VT00Z 50N-30S, 100W-120E	QWFQ99.TIF
@48HR Pacific Surface Forecast VT00Z 50N-30S 110W-130E	xxxxxx.TIF
@48HR Pacific Surface Forecast VT12Z 50N-30S 110W-130E	xxxxxx.TIF
@48HR Pacific Surface Forecast (Most Current)	xxxxxx.TIF
48HR Surface Forecast VT06Z 60N-55S, 55W-70E	xxxxxx.TIF
48HR Surface Forecast VT18Z 60N-55S, 55W-70E	xxxxxx.TIF
48HR Surface Forecast (Most Current)	QDEQ99.TIF
@72HR Pacific Surface Forecast VT00Z 50N-30S 110W-130E	xxxxxx.TIF
@72HR Pacific Surface Forecast VT12Z 50N-30S 110W-130E	xxxxxx.TIF
@72HR Pacific Surface Forecast (Most Current)	xxxxxx.TIF

SURFACE CHARTS - SE PACIFIC

24HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W	PYFE79.TIF
24HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W	PYFE80.TIF
24HR Tropical Surface Forecast(Most Current)	PYFE10.TIF
48HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W	PYFI81.TIF
48HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W	PYFI82.TIF
48HR Tropical Surface Forecast(Most Current)	PYFI10.TIF
72HR Tropical Surface Forecast(W Half)VT00,20S-30N,80W-145W	PYFK83.TIF
72HR Tropical Surface Forecast(W Half)VT12,20S-30N,80W-145W	PYFK84.TIF
72HR Tropical Surface Forecast (Most Current)	PYFK10.TIF

UPPER AIR CHARTS

@48HR 500 MB Forecast VT00Z 50N-25S, 120W-120E	xxxxxx.TIF
@48HR 500 MB Forecast VT12Z 50N-25S, 120W-120E	xxxxxx.TIF
@48HR 500 MB Forecast (Most Current)	QHFQ50.TIF

TROPICAL CYCLONE CHARTS

72 HR Tropical Cyclone Danger Area VT 03Z 0N-40N, 80W-170W	PWFK88.TIF
72 HR Tropical Cyclone Danger Area VT 09Z 0N-40N, 80W-170W	PWFK89.TIF
72 HR Tropical Cyclone Danger Area VT 15Z 0N-40N, 80W-170W	PWFK90.TIF
72 HR Tropical Cyclone Danger Area VT 21Z 0N-40N, 80W-170W	PWFK91.TIF
72 HR Tropical Cyclone Danger Area (Most Current)	PWFK11.TIF

Note: Charts replaced by High Wind/Wave Warning chart Dec 01 - May 14.

SATELLITE IMAGERY

00Z Eastern Pacific Satellite Image (IR)55N-40S, 105W-155E	evpz00.jpg
06Z Eastern Pacific Satellite Image (IR)55N-40S, 105W-155E	evpz06.jpg
12Z Eastern Pacific Satellite Image (IR)55N-40S, 105W-155E	evpz12.jpg
18Z Eastern Pacific Satellite Image (IR)55N-40S, 105W-155E Eastern Pacific Satellite Image (Most Current)	evpz18.jpg evpz11.jpg
00Z Western Pacific Satellite Image (IR) 05N-40S, 130W-165E	evps00.jpg
06Z Western Pacific Satellite Image (IR) 05N-40S, 130W-165E	evps06.jpg
12Z Western Pacific Satellite Image (IR) 05N-40S, 130W-165E	evps12.jpg
18Z Western Pacific Satellite Image (IR) 05N-40S, 130W-165E Western Pacific Satellite Image (Most Current)	evps18.jpg evps11.jpg

SEA SURFACE TEMPERATURE CHARTS

Pacific SST Chart 23N-42N, E of 136W	PTBA89.TIF
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SCHEDULE INFORMATION

Radiofax Schedule (Honolulu, HI) Part I	xxxxxx.TIF
Radiofax Schedule (Honolulu, HI) Part II	xxxxxx.TIF
Radiofax Schedule (Honolulu, HI) Part III	xxxxxx.TIF
Radiofax Schedule (DOS Text Version)	hfhi.txt
Test/Map Symbols/General Notice	xxxxxx.TIF
Internet File Names (This file)	rfaxhi.txt

@ Not transmitted via Honolulu radiofax but listed here for convenience

Further information see: <http://www.nws.noaa.gov/om/marine/home.htm>

Author: Timothy Rulon, NWS Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified Oct 18, 2005
Document URL: <http://weather.noaa.gov/pub/fax/rfaxhi.txt>
<ftp://weather.noaa.gov/fax/rfaxhi.txt>

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
HIGHSEAS, FORECAST DISCUSSION, OFFSHORE, NAVTEX, and OPEN LAKE PRODUCTS

This file is intended to assist mariners using the FTPMAIL system which is used to obtain National Weather Service products via e-mail. The following is an example in the use of the FTPMAIL system. NOTE CAPITALIZATION!

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body:
open
cd data
cd forecasts
cd marine
cd high_seas
get north_pacific.txt
get north_atlantic.txt
quit

The "help" file contains a more detailed description of the FTPMAIL system and available products. To obtain a copy of the FTPMAIL "help file".

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: help

HIGH SEAS FORECASTS

These files may be found in directory:
ftp://weather.noaa.gov/data/forecasts/marine/high_seas/

PRODUCT DESCRIPTION	FILE NAME
Northwest Atlantic Highseas (GMDSS Area IV)	north_atlantic.txt
Northeast Pacific Highseas (GMDSS Area XII)	north_pacific.txt
Peru Highseas (GMDSS Area XVI)	east_pacific_3.txt
25S-0N, 160E-120W South Central Pacific	south_hawaii.txt
30-60N, east of 160 E (p/o NE Pacific)	east_pacific_1.txt
0-30N, E of 140W (p/o NE Pacific)	east_pacific_2.txt
0-30N, 160E-140W (p/o NE Pacific)	north_hawaii.txt

FORECAST DISCUSSION

These files may be found in directory:
<ftp://weather.noaa.gov/data/raw/ag/>

Example:
Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body:
open
cd data
cd raw
cd ag
get agnt40.kwnm.mim.atn.txt
quit

Note...these Forecast Discussions are primarily intended for use by forecasters and make heavy use of abbreviations. A glossary is not available.

Northwest Atlantic	agnt40.kwnm.mim.atn.txt
Northeast Pacific	agpn40.kwnm.mim.pac.txt
Gulf, Caribbean Sea & SW N. Atlantic	agxx40.knhc.mim.ats.txt

OFFSHORE FORECASTS

For offshore forecasts, NAVTEX forecasts can also be utilized which are nearly identical and may contain supplementary information at times for coastal areas.

These files may be found in directory:

ftp://iwin.nws.noaa.gov/data/text/FZNT21 (FZNT22, etc)
or
ftp://iwin2.nws.noaa.gov/data/text/FZNT21 (FZNT22, etc)

Example:

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: open iwin.nws.noaa.gov
cd data
cd text
cd FZNT21
get KWBC.TXT
quit

PRODUCT DESCRIPTION	FILE NAME
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New England	/FZNT21/KWBC.TXT
Mid-Atlantic	/FZNT22/KWBC.TXT
SW North Atlantic, Caribbean	/FZNT23/KNHC.TXT
Gulf of Mexico	/FZNT24/KNHC.TXT
Washington, Oregon	/FZPN25/KWBC.TXT
California	/FZPN26/KWBC.TXT
Eastern Gulf of Alaska	/FZAK67/PAJK.TXT
Western Gulf of Alaska	/FZAK61/PAFC.TXT
Bering Sea	/FZAK62/PAFC.TXT
Hawaii	/FZHW60/PHFO.TXT

NAVTEX FORECASTS

These files may be found in directory:

ftp://weather.noaa.gov/data/forecasts/marine/offshore/

Example:

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: open
cd data
cd forecasts
cd marine
cd offshore
get fznt23.kwnm.off.n01.txt
quit

PRODUCT DESCRIPTION	FILE NAME
NAVTEX Boston, MA	fznt23.kwnm.off.n01.txt
NAVTEX Chesapeake, VA	fznt24.kwnm.off.n02.txt
NAVTEX Savannah, GA	fznt25.kwnm.off.n03.txt
NAVTEX Miami, FL	fznt25.knhc.off.n04.txt
NAVTEX San Juan, PR	fznt26.knhc.off.n05.txt
NAVTEX New Orleans, LA	fznt27.knhc.off.n06.txt
NAVTEX Astoria, OR	fzpn24.kwnm.off.n09.txt
NAVTEX Pt. Reyes, CA	fzpn23.kwnm.off.n08.txt
NAVTEX Cambria, CA	fzpn22.kwnm.off.n07.txt
NAVTEX Honolulu, HI	fzwh61.phfo.off.n10.txt
NAVTEX Kodiak,(SE) AK	fzak61.pajk.off.n11.txt
NAVTEX Kodiak,(N Gulf) AK	fzak63.pafc.off.n12.txt
NAVTEX Kodiak,(W) AK	fzak64.pafc.off.n13.txt
NAVTEX Kodiak,(NW and Artic) AK	fzak69.pafg.off.n14.txt

OPEN LAKE FORECASTS

These files may be found in directory:
 ftp://weather.noaa.gov/data/raw/fz/

Example:

```
Send an e-mail to:      ftpmail@weather.noaa.gov
Subject Line:          Put anything you like
Body:
open
cd data
cd raw
cd fz
get fzus61.kbuf.glf.sl.txt
quit
```

PRODUCT DESCRIPTION	FILE NAME
St. Lawrence	fzus61.kbuf.glf.sl.txt
Lake Ontario	fzus61.kbuf.glf.lo.txt
Lake Erie	fzus61.kcle.glf.le.txt
Lake St. Clair	fzus63.kdtx.glf.sc.txt
Lake Huron	fzus63.kdtx.glf.lh.txt
Lake Michigan	fzus63.klot.glf.lm.txt
Lake Superior	fzus63.kmqt.glf.ls.txt

Further information see: <http://www.nws.noaa.gov/om/marine/home.htm>

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
 National Weather Service
 Last Modified Oct 18, 2005
 Document URL: <http://weather.noaa.gov/pub/fax/marinel.txt>
<ftp://weather.noaa.gov/fax/marinel.txt>

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
HURRICANE PRODUCTS

This file is intended to assist mariners using the FTPMAIL system which is used to obtain National Weather Service products via e-mail. The following is an example in the use of the FTPMAIL system. NOTE CAPITALIZATION!

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body:
open
cd data
cd hurricane_products
cd atlantic
cd weather
get outlook.txt
cd /data
cd hurricane_products
cd atlantic
cd storm_2
get technical_advisory.txt
quit

The "help" file contains a more detailed description of the FTPMAIL system and available products. To obtain a copy of the FTPMAIL "help file".

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: help

ATLANTIC HURRICANE PRODUCTS

These files may be found in directory:
ftp://weather.noaa.gov/data/hurricane_products/atlantic

PRODUCT DESCRIPTION	FILE NAME
Tropical WX Outlook	/weather/outlook.txt
Tropical WX Discussion	/weather/discussion.txt
Tropical WX Summary	/weather/summary.txt
Tropical WX Disturbance Stmt	/weather/advisory.txt
Tropical Cyclone Update (Storm #1)	/storm_1/update.txt
Tropical Cyclone Update (Storm #2)	/storm_2/update.txt
Tropical Cyclone Update (Storm #3)	/storm_3/update.txt
Tropical Cyclone Update (Storm #4)	/storm_4/update.txt
Tropical Cyclone Update (Storm #5)	/storm_5/update.txt
Tropical Cyclone Discussion (Storm #1)	/storm_1/discussion.txt
Tropical Cyclone Discussion (Storm #2)	/storm_2/discussion.txt
Tropical Cyclone Discussion (Storm #3)	/storm_3/discussion.txt
Tropical Cyclone Discussion (Storm #4)	/storm_4/discussion.txt
Tropical Cyclone Discussion (Storm #5)	/storm_5/discussion.txt
Public Advisory (Storm #1)	/storm_1/advisory.txt
Public Advisory (Storm #2)	/storm_2/advisory.txt
Public Advisory (Storm #3)	/storm_3/advisory.txt
Public Advisory (Storm #4)	/storm_4/advisory.txt
Public Advisory (Storm #5)	/storm_5/advisory.txt
Tropical Depression Forecast (Storm #1)	/storm_1/technical_advisory.txt
Tropical Depression Forecast (Storm #2)	/storm_2/technical_advisory.txt
Tropical Depression Forecast (Storm #3)	/storm_3/technical_advisory.txt
Tropical Depression Forecast (Storm #4)	/storm_4/technical_advisory.txt

Tropical Depression Forecast (Storm #5)	/storm_5/technical_advisory.txt
Hurricane Probabilities (Storm #1)	/storm_1/strike_probability.txt
Hurricane Probabilities (Storm #2)	/storm_2/strike_probability.txt
Hurricane Probabilities (Storm #3)	/storm_3/strike_probability.txt
Hurricane Probabilities (Storm #4)	/storm_4/strike_probability.txt
Hurricane Probabilities (Storm #5)	/storm_5/strike_probability.txt
RECON Plan	TBD

Atlantic Tropical Weather Outlook normally issued 0300z, 0900z, 1500z and 2100z during hurricane season, June 1 - November 30. Remaining products issued when active systems exist. May be issued at 3-hourly intervals and other unscheduled times as system approaches landfall.

EASTERN PACIFIC HURRICANE PRODUCTS

These files may be found in directory:

ftp://weather.noaa.gov/data/hurricane_products/eastern_pacific

PRODUCT DESCRIPTION	FILE NAME
Tropical WX Outlook	/weather/outlook.txt
Tropical WX Discussion	/weather/discussion.txt
Tropical WX Summary	/weather/summary.txt
Tropical WX Disturbance Stmt	/weather/advisory.txt
Tropical Cyclone Update (Storm #1)	/storm_1/update.txt
Tropical Cyclone Update (Storm #2)	/storm_2/update.txt
Tropical Cyclone Update (Storm #3)	/storm_3/update.txt
Tropical Cyclone Update (Storm #4)	/storm_4/update.txt
Tropical Cyclone Update (Storm #5)	/storm_5/update.txt
Tropical Cyclone Discussion (Storm #1)	/storm_1/discussion.txt
Tropical Cyclone Discussion (Storm #2)	/storm_2/discussion.txt
Tropical Cyclone Discussion (Storm #3)	/storm_3/discussion.txt
Tropical Cyclone Discussion (Storm #4)	/storm_4/discussion.txt
Tropical Cyclone Discussion (Storm #5)	/storm_5/discussion.txt
Public Advisory (Storm #1)	/storm_1/advisory.txt
Public Advisory (Storm #2)	/storm_2/advisory.txt
Public Advisory (Storm #3)	/storm_3/advisory.txt
Public Advisory (Storm #4)	/storm_4/advisory.txt
Public Advisory (Storm #5)	/storm_5/advisory.txt
Tropical Depression Forecast (Storm #1)	/storm_1/technical_advisory.txt
Tropical Depression Forecast (Storm #2)	/storm_2/technical_advisory.txt
Tropical Depression Forecast (Storm #3)	/storm_3/technical_advisory.txt
Tropical Depression Forecast (Storm #4)	/storm_4/technical_advisory.txt
Tropical Depression Forecast (Storm #5)	/storm_5/technical_advisory.txt
RECON Plan	TBD

Eastern Pacific Tropical Weather Outlook normally issued 0300z, 0900z, 1500z and 2100z during hurricane season, May 15 - November 30. Remaining products issued when active systems exist. May be issued at 3-hourly intervals and other unscheduled times as system approaches landfall.

CENTRAL PACIFIC HURRICANE PRODUCTS

These files may be found in directory:

ftp://weather.noaa.gov/data/hurricane_products/central_pacific

PRODUCT DESCRIPTION	FILE NAME
Tropical WX Outlook	/weather/outlook.txt
Tropical WX Discussion	(discontinued)

Tropical WX Summary	/weather/summary.txt
Tropical WX Disturbance Stmt	/weather/advisory.txt
Tropical Cyclone Update (Storm #1)	/storm_1/update.txt
Tropical Cyclone Update (Storm #2)	/storm_2/update.txt
Tropical Cyclone Update (Storm #3)	/storm_3/update.txt
Tropical Cyclone Update (Storm #4)	/storm_4/update.txt
Tropical Cyclone Update (Storm #5)	/storm_5/update.txt
Tropical Cyclone Discussion (Storm #1)	/storm_1/discussion.txt
Tropical Cyclone Discussion (Storm #2)	/storm_2/discussion.txt
Tropical Cyclone Discussion (Storm #3)	/storm_3/discussion.txt
Tropical Cyclone Discussion (Storm #4)	/storm_4/discussion.txt
Tropical Cyclone Discussion (Storm #5)	/storm_5/discussion.txt
Public Advisory (Storm #1)	/storm_1/advisory.txt
Public Advisory (Storm #2)	/storm_2/advisory.txt
Public Advisory (Storm #3)	/storm_3/advisory.txt
Public Advisory (Storm #4)	/storm_4/advisory.txt
Public Advisory (Storm #5)	/storm_5/advisory.txt
Tropical Depression Forecast (Storm #1)	/storm_1/technical_advisory.txt
Tropical Depression Forecast (Storm #2)	/storm_2/technical_advisory.txt
Tropical Depression Forecast (Storm #3)	/storm_3/technical_advisory.txt
Tropical Depression Forecast (Storm #4)	/storm_4/technical_advisory.txt
Tropical Depression Forecast (Storm #5)	/storm_5/technical_advisory.txt
RECON PLAN	TBD

Central Pacific Tropical Weather Outlook normally issued 0300z, 0900z, 1500z and 2100z during hurricane season, June 1 - November 30.

Remaining products issued when active systems exist. May be issued at 3-hourly intervals and other unscheduled times as system approaches landfall.

WESTERN PACIFIC HURRICANE PRODUCTS

These files may be found in directory:
<http://weather.noaa.gov/pub/data/raw/wt>

Example:

```
Send an e-mail to:      ftpmail@weather.noaa.gov
Subject Line:          Put anything you like
Body:
open
cd data
cd raw
cd wt
get wtpq31.pgum.tcp.pq1.txt
quit
```

PRODUCT DESCRIPTION	FILE NAME
Public Advisory (Storm #1)	/wtpq31.pgum.tcp.pq1.txt
Public Advisory (Storm #2)	/wtpq32.pgum.tcp.pq2.txt
Public Advisory (Storm #3)	/wtpq33.pgum.tcp.pq3.txt
Public Advisory (Storm #4)	/wtpq34.pgum.tcp.pq4.txt
Public Advisory (Storm #5)	/wtpq35.pgum.tcp.pq5.txt

These products may only contain information on cyclones with potential landfalls in U.S. areas. See NAVY products below for additional information..

WESTERN PACIFIC HURRICANE PRODUCTS (NAVY)

These files may be found in directory:
<http://weather.noaa.gov/pub/data/raw/wt>

Example:

```
Send an e-mail to:      ftpmail@weather.noaa.gov
Subject Line:          Put anything you like
Body:
               open
               cd data
               cd raw
               cd wt
               get wtpn21.pgtw..txt
               quit
```

PRODUCT DESCRIPTION	FILE NAME
NW Pacific Tropical Cyclone Formation Alert Storm #1	/wtpn21.pgtw..txt
NW Pacific Tropical Cyclone Formation Alert Storm #2	/wtpn22.pgtw..txt
NW Pacific Tropical Cyclone Formation Alert Storm #2	/wtpn23.pgtw..txt
NW Pacific Tropical Cyclone Formation Alert Storm #4	/wtpn24.pgtw..txt
NW Pacific Tropical Cyclone Formation Alert Storm #5	/wtpn25.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #1	/wtps21.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #2	/wtps22.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #3	/wtps23.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #4	/wtps24.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #5	/wtps25.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #1	/wtpn31.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #2	/wtpn32.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #3	/wtpn33.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #4	/wtpn34.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #5	/wtpn35.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #1	/wtpS31.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #2	/wtpS32.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #3	/wtpS33.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #4	/wtpS34.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #5	/wtpS35.pgtw..txt

Author: Timothy Rulon
Marine and Coastal Services Branch, OS21
National Weather Service
Last Modified Friday June 14, 2005
Document URL: <http://weather.noaa.gov/pub/fax/marine2.txt>

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
COASTAL and NEARSHORE MARINE FORECASTS

This file is intended to assist mariners using the FTPMAIL system which is used to obtain National Weather Service products via e-mail. The following is an example in the use of the FTPMAIL system. NOTE CAPITALIZATION!

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body:
open
cd data
cd raw
cd fz
get fzus56.kmtr.cwf.mtr.txt
quit

The "help" file contains a more detailed description of the FTPMAIL system and available products. To obtain a copy of the FTPMAIL "help file".

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: help

COASTAL and NEARSHORE MARINE FORECASTS

These files may be found in directory:
ftp://weather.noaa.gov/data/raw/fz

PRODUCT DESCRIPTION	FILE NAME
Caribou, ME	fzus51.kcar.cwf.car.txt
Gray, ME	fzus51.kgyx.cwf.gyx.txt
Taunton, MA	fzus51.kbox.cwf.box.txt
New York, NY	fzus51.kokx.cwf.okx.txt
Philadelphia, PA	fzus51.kphi.cwf.phi.txt
Washington, DC	fzus51.klwx.cwf.lwx.txt
Wakefield, VA	fzus51.kakq.cwf.akq.txt
Newport/Morehead City, NC	fzus52.kmhx.cwf.mhx.txt
Wilmington, NC	fzus52.kilm.cwf.ilm.txt
Charleston, SC	fzus52.kchs.cwf.chs.txt
Jacksonville, FL	fzus52.kjax.cwf.jax.txt
Melbourne, FL	fzus52.kmlb.cwf(mlb).txt
Miami, FL	fzus52.kmfl.cwf.mfl.txt
Key West, FL	fzus52.keyw.cwf.eyw.txt
San Juan, PR	fzca52.tjsj.cwf.sju.txt
San Juan, PR (Spanish)	fzca52.tjsj.cwf.spn.txt
Tampa, FL	fzus52.ktbw.cwf.tbw.txt
Tallahassee, FL	fzus52.ktae.cwf.tae.txt
Mobile, AL	fzus54.kmob.cwf.mob.txt
New Orleans, LA	fzus54.klix.cwf.lix.txt
Lake Charles, LA	fzus54.klch.cwf.lch.txt
Houston/Galveston, TX	fzus54.khgx.cwf.hgx.txt
Corpus Christi, TX	fzus54.kcrp.cwf.crp.txt
Brownsville, TX	fzus54.kbro.cwf.bro.txt
Seattle, WA	fzus56.ksew.cwf.sew.txt
Portland, OR	fzus56.kpqr.cwf.pqr.txt
Medford, OR	fzus56.kmfr.cwf.mfr.txt
Eureka, CA	fzus56.keka.cwf.eka.txt

San Francisco, CA	fzus56.kmtr.cwf.mtr.txt
Los Angeles, CA	fzus56.klox.cwf.lox.txt
San Diego, CA	fzus56.ksgx.cwf.sgx.txt
Hawaii	fzhw50.phfo.cwf.hfo.txt
Marianas (Guam)	fzmy50.pgum.cwf.my.txt
Micronesia	fzpq50.pgum.cwf.pq.txt
Samoa	fzzs50.nstu.cwf.ppg.txt
Buffalo, NY	fzus51.kbuf.nsh.buf.txt
Cleveland, OH	fzus51.kcle.nsh.cle.txt
Detroit/Pontiac, MI	fzus53.kdtx.nsh.dtx.txt
Gaylord, MI	fzus53.kapx.nsh.apx.txt
Grand Rapids, MI	fzus53.kgrr.nsh.grr.txt
Northern Indiana, IN	fzus53.kiwx.nsh.ixw.txt
Chicago, IL	fzus53.klot.nsh.lot.txt
Milwaukee/Sullivan, WI	fzus53.kmkx.nsh.mkx.txt
Green Bay, WI	fzus53.kgrb.nsh.grb.txt
Marquette, MI	fzus53.kmqt.nsh.mqt.txt
Duluth, MN	fzus53.kdlh.nsh.dlh.txt
AK, SE Inner Coastal Waters	fzak51.pajk.cwf.ajk.txt
AK, SE Outside Coastal Waters	fzak52.pajk.cwf.aeg.txt
AK, Yakutat Bay	fzak57.paya.cwf.yak.txt
AK, North Gulf Coast and Kodiak	fzak51.pafc.cwf.aer.txt
AK, Valdez Arm and Narrows	fzak58.pavw.cwf.vws.txt
AK, Chiniak and Marmot Bays	fzak58.padq.cwf.adq.txt
Southwest AK and the Aleutians	fzak52.pafc.cwf.alu.txt
Northwest Western	fzak52.pafg.cwf.wcz.txt
Alaskan Arctic Coast	fzak51.pafg.cwf.nsb.txt

Author: Timothy Rulon, Marine and Coastal Weather Services Branch (W/OS21)
National Weather Service
Last Modified May 31, 2005
Document URL: <http://weather.noaa.gov/pub/fax/marine3.txt>
<ftp://weather.noaa.gov/fax/marine3.txt>

NATIONAL WEATHER SERVICE MARINE BUOY and C-MAN OBSERVATIONS

This file is intended to assist mariners using the FTPMAIL system which is used to obtain National Weather Service products via e-mail. The following is an example in the use of the FTPMAIL system to retrieve the latest NWS buoy and C-MAN observations.

NOTE CAPITALIZATION!

For the latest operational status of buoy and C-MAN stations see:
<http://www.ndbc.noaa.gov/wstat.shtml>

For questions on buoy or C-MAN observations contact:
webmaster.ndbc@noaa.gov

Example:

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: open www.ndbc.noaa.gov
cd data
cd latest_obs
get 42007.txt
get gdill.txt
quit

The "help" file contains a more detailed description of the FTPMAIL system and available products. To obtain a copy of the FTPMAIL "help file".

Send an e-mail to: ftpmail@weather.noaa.gov
Subject Line: Put anything you like
Body: help

BUOY and C-MAN OBSERVATION ID'S

These files may be found in directory:
ftp://www.ndbc.noaa.gov/data/latest_obs/
e.g.
ftp://www.ndbc.noaa.gov/data/latest_obs/41001.txt

PLATFORM ID	HULL/ PAYLOAD	LOCATION	LATITUDE	LONGITUDE
41001*	6N03	D E. HATTERAS	34.68N	72.66W
41002*	6N26	V S. HATTERAS	32.36N	75.46W
41004*	3D27	V EDISTO	32.50N	79.10W
41008*	3D44	A GRAYS REEF	31.40N	80.87W
41009	6N46	A CANAVERAL	28.50N	80.18W
41010	6N19	V CANAVERAL EAST	28.91N	78.55W
41012	3D48	A ST. AUGUSTINE,	30.04	80.53W
41013*	3D17	D FRYING PAN SHOALS	33.48N	77.58W
41025*	3D33	D DIAMOND SHOALS	35.15N	75.29W
42001*	10D10	M MID GULF	25.84N	89.66W
42002*	10D08	M WESTERN GULF	25.17N	94.42W
42003*	10D11	M EAST GULF	26.01N	85.91W
42007*	3D14	D BILOXI	30.09N	88.77W
42019*	3D61	D LANEILLE	27.92N	95.36W
42020*	3D40	D EILEEN	26.95N	96.70W

42035*	3D47	D	GALVESTON	29.25N	94.41W
42036*	3D12	D	WEST TAMPA	28.51N	84.51W
42038	3D35	A	NORTH MID GULF	27.42N	92.58W
42039*	3D54	D	PENSACOLA S.	28.80N	86.06W
42040	3D60	D	MOBILE SOUTH	29.21N	88.20W
44004*	6N07	D	HOTEL	38.47N	70.53W
44005*	6N23	D	GULF OF MAINE	43.19N	69.18W
44007*	3D46	V	PORTLAND	43.53N	70.14W
44008*	3D05	V	NANTUCKET	40.50N	69.43W
44009*	3D08	V	DELAWARE BAY	38.46N	74.70W
44011*	6N11	D	GEORGES BANK	41.11N	66.62W
44013*	3DV04	D	BOSTON	42.35N	70.69W
44014	3D18	D	VIRGINIA BEACH	36.61N	74.84W
44017*	3D49	A	MONTAUK POINT	40.70N	72.00W
44018*	3D51	A	SE CAPE COD	41.25N	69.29W
44025*	3D65	D	LONG ISLAND	40.25N	73.17W
44027*	3D29	A	JONESPORT	44.27N	67.31W
45001*	3D23	D	MID SUPERIOR	48.07N	87.78W
45002*	3D37	V	NORTH MICHIGAN	45.33N	86.42W
45003*	3DV03	V	NORTH HURON	45.35N	82.84W
45004*	3D38	V	EAST SUPERIOR	47.57N	86.55W
45005*	3D63	D	WEST ERIE	41.68N	82.40W
45006*	3DV05	V	WEST SUPERIOR	47.32N	89.83W
45007*	3D35	D	SOUTH MICHIGAN	42.68N	87.03W
45008*	3D10	V	SOUTH HURON	44.28N	82.42W
45012*	3DV02	V	LAKE ONTARIO	43.62N	77.41W
46001*	6N21	D	GULF OF ALASKA	56.30N	148.17W
46002*	6N16	D	WEST OREGON	42.58N	130.36W
46005*	6N01	D	W. ASTORIA	46.05N	131.02W
46006*	6N33	V	SW. ASTORIA	40.80N	137.48W
46011*	3D42	D	SANTA MARIA	34.88N	120.87W
46012*	3D52	D	HALF MOON BAY	37.36N	122.88W
46013*	3D15	V	BODEGA BAY	38.23N	123.32W
46014*	3D31	D	PT ARENA	39.22N	123.97W
46015*	3D57	D	PORT ORFORD	42.75N	124.85W
46022*	3D36	V	EEL RIVER	40.72N	124.52W
46023	10D04	D	PT ARGUELLO	34.70N	120.96W
46025*	3D59	V	SANTA MONICA	33.75N	119.08W
46026*	3D39	V	SAN FRANCISCO	37.76N	122.83W
46027*	3D20	V	ST GEORGES	41.85N	124.38W
46028*	3D02	D	SAN MARTIN	35.74N	121.89W
46029*	3D62	D	COL. RIVER BAR	46.12N	124.51W
46035*	12D02	M	BERING SEA	57.05N	177.58W
46041*	3D09	D	CAPE ELIZABETH	47.34N	124.75W
46042*	3D43	D	MONTEREY BAY	36.75N	122.42W
46047*	3D53	V	TANNER BANK	32.43N	119.53W
46050*	3D55	V	STONEWALL BANK	44.61N	124.50W
46053*	3D58	A	E. SANTA BARB	34.24N	119.85W
46054	10D12	D	W. SANTA BARB	34.27N	120.44W
46059*	6N13	D	CALIFORNIA	37.99N	129.95W
46060*	3D64	V	WEST ORCA BAY	60.58N	146.83W
46061*	6N32	V	SEAL ROCKS (S.	60.22N	146.83W
46063*	6N31	D	PT CONCEPTION	34.28N	120.67W
46066*	6N25	D	KODIAK	52.70N	154.98W
46069*	3D32	A	SO. SANTA ROSA	33.65N	120.20W
46071*	6N44	A	AMCHITKA	51.17N	179.00E
46072*	6N34	D	SOUTH ALEUTIAN	51.63N	172.16W
46075*	6N37	D	SHUMAGIN ISLAN	53.93N	160.81W
46078*	6N48	D	ALBATROSS BANK	56.05N	152.45W
46080*	6N29	D	KENNEDY ENTRAN	58.00N	150.01W
46081*	3D41	D	WESTERN PRINCE	60.78N	148.20W
46082*	6N42	D	CAPE SUCKLING	59.69N	143.42W

46083*	6N36	D	FAIRWEATHER	58.25N	138.00W
46084*	6N41	D	SITKA SOUND	56.59N	136.16W
46086*	3D68	A	SAN CLEMENTE B	32.50N	118.00W
46087	3D72	A	NEAH BAY, WA	48.49N	124.73W
46088	3D74	A	NEW DUNGENESS	48.33N	123.17W
46089	3D53	A	TILLAMOOK, OR	45.88N	125.77W
51001*	6N18	V	NW. HAWAII	23.43N	162.21W
51002*	6N27	V	SW. HAWAII	17.15N	157.79W
51003*	6N28	V	W. HAWAII	19.16N	160.74W
51004*	6N38	A	SE. HAWAII	17.52N	152.48W
51028	3D13	D	CHRISTMAS ISL.	00.02N	153.87W

Total Base Funded Buoys:76

Total Other Buoys :12

Total Moored Buoys :88

*Base funded station of National Weather Service (NWS);
however, all stations report data to NWS.

NDBC MOORED BUOY STATION LEGEND:

Hull Type-Anemometer Height

12D - 12 meter discus 10 m

10D - 10 meter discus 10 m

6N - 6 meter NOMAD 5 m

3D/3DV meter discus 5 m

LNS - 12 meter discus 8.5 m

Payload Types

A - ARES

D - DACT

M - MARS

V - VEEP

PLATFORM ID	PAYOUT	LOCATION	LATITUDE	LONGITUDE
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aban6	V	ALEXANDRIA BAY NY	44.33N	75.93W
alsn6*	A	AMBROSE LIGHT NY	40.45N	73.80W
amaa2*	A	EAST AMATULI ISLAND	58.92N	151.95W
aug2*	M	AUGUSTINE ISLAND AK	59.38N	153.35W
blia2*	V	BLIGH REEF LIGHT	60.84N	146.88W
burl1*	M	SOUTHWEST PASS LA	28.91N	89.43W
buzm3*	M	BUZZARDS BAY MA	41.40N	71.03W
caro3*	M	CAPE ARAGO OR	43.34N	124.38W
cdrf1*	V	CEDAR KEY FL	29.14N	83.03W
chl2*	D	CHESAPEAKE LIGHT VA	36.91N	75.71W
clkn7*	M	CAPE LOOKOUT NC	34.62N	76.53W
dbln6*	M	DUNKIRK NY	42.49N	79.35W
desw1*	D	DESTRUCTION ISLAND WA	47.68N	124.49W
disw3*	D	DEVILS ISLAND WI	47.08N	90.73W
dpial*	V	DAUPHIN ISLAND AL	30.25N	88.07W
drfa2*	M	DRIFT RIVER TERMINAL	60.55N	152.14W
dryf1*	M	DRY TORTUGAS FL	24.64N	82.86W
ducn7*	V	DUCK PIER NC	36.18N	75.75W
fbis1*	M	FOLLY ISLAND SC	32.69N	79.89W
ffia2*	D	FIVE FINGERS AK	57.27N	133.63W
fila2*	A	FLAT ISLAND LIGHT	59.33N	152.00W
fpsn7*	D	FRYING PAN SHOAL	33.49N	77.59W
fwyf1*	M	FOWEY ROCK FL	25.59N	80.10W
gdil1*	M	GRAND ISLE LA	29.27N	89.96W
iosn3*	D	ISLE OF SHOALS	42.97N	70.62W
ktnf1*	M	KEATON BEACH FL	29.82N	83.59W

lkwf1*	M	LAKEWORTH FL	26.61N	80.03W
lonf1*	M	LONG KEY FL	24.84N	80.86W
lscm4	V	LAKE ST. CLAIR	42.47N	82.76W
mdrml1*	D	MT DESERT ROCK	43.97N	68.13W
mism1*	D	MATINICUS ROCK ME	43.78N	68.86W
mlrf1*	V	MOLASSES REEF FL	25.01N	80.38W
mrka2*	V	MIDDLE ROCK LIGHT	61.08N	146.66W
nwpo3*	D	NEWPORT OR	44.61N	124.07W
pila2*	M	PILOT ROCK AK	59.74N	149.47W
pilm4*	V	PASSAGE ISLAND MI	48.22N	88.37W
pota2*	V	POTATO POINT AK	61.06N	146.70W
ptac1*	M	POINT ARENA CA	38.96N	123.74W
ptat2*	M	PORT ARANSAS TX	27.83N	97.05W
ptgc1*	M	POINT ARGUELLO CA	34.58N	120.65W
roam4*	D	ROCK OF AGES	47.87N	89.31W
sanf1*	M	SAND KEY FL	24.46N	81.88W
sauf1*	V	ST. AUGUSTINE FL	29.86N	81.27W
sbiol1*	M	SOUTH BASS ISLAND	41.63N	82.84W
sgnw3*	D	SHEBOYGAN WI	43.75N	87.69W
sgof1*	M	ST. GEORGE OFFSHORE	29.41N	84.86W
siswl*	M	SMITH ISLAND WA	48.32N	122.84W
smkf1*	M	SOMBRENO KEY FL	24.63N	81.11W
spgf1*	M	SETTLEMENT PT GBI	26.70N	78.99W
srst2*	M	SABINE TX	29.67N	94.05W
stdm4*	D	STANNARD ROCK MI	47.18N	87.23W
supn6	V	SUPERIOR SHOALS NY	44.47N	75.80W
thin6	V	THOUSAND ISL. NY	44.30N	75.98W
tplm2*	M	THOMAS POINT MD	38.90N	76.44W
ttiwl1*	D	TATOOSH ISLAND WA	48.39N	124.74W
venf1*	A	VENICE, FL	27.07N	82.45W
wpowl1*	V	WEST POINT WA	47.66N	122.44W

Total Base Funded Stations: 53

Total Other Stations : 04

Total Stations : 57

*Base funded station of National Weather Service (NWS);
however, all stations report data to NWS.

NDBC C-MAN STATION LEGEND:

Payload Types

A - ARES

D - DACT

M - MARS

V - VEEP

For current buoy status see: <http://www.ndbc.noaa.gov/wstat.shtml>

MISCELLANEOUS STATION ID'S

In addition, data are available from the following buoys and stations
For information on location, status, etc, see:

http://www.ndbc.noaa.gov/to_station.shtml

These files may be found in directory:

ftp://www.ndbc.noaa.gov/data/latest_obs/

e.g.

ftp://www.ndbc.noaa.gov/data/latest_obs/62001.txt

Canadian Stations

44137 East Scotia Slope

42.26 N 62.00 W

44138	SW Grand Banks	44.26 N 53.62 W
44139	Banquereau Banks	44.26 N 57.08 W
44140	Tail of the Bank	43.75 N 51.74 W
44141	Laurentian Fan	43.00 N 58.00 W
44142	La Have Bank	42.50 N 64.02 W
44150	Point Sapin	46.85 N 64.64 W
44251	Nickerson Bank	46.44 N 53.39 W
44255	NE Burgeo Bank	47.28 N 57.35 W
44258	Halifax Harbor	44.50 N 63.40 W
45132	Port Stanley	42.47 N 81.22 W
45135	Prince Edward Pt	43.79 N 76.87 W
45136	Slate Island	48.53 N 86.95 W
45137	Georgian Bay	45.54 N 81.01 W
45138	Mount Louis	49.54 N 65.77 W
45139	West Lake Ontario	43.40 N 79.45 W
45140	Lake Winnipeg S. Basin	50.79 N 96.73 W
45141	Great Slave Lake	61.18 N 115.31 W
45142	Port Colborne	42.74 N 79.35 W
45143	South Georgian Bay	44.94 N 80.63 W
45144	Lake Winnipeg North	53.20 N 98.83 W
45145	Lake Winnipeg Narrows	51.45 N 96.70 W
45147	Lake St Clair	42.43 N 82.68 W
45148	Lake of the Woods	49.70 N 94.52 W
45149	Southern Lake Huron	43.54 N 82.07 W
45150	Great Slave Lake North	61.92 N 113.85 W
45151	Lake Simcoe	44.50 N 79.37 W
45152	Lake Nipissing	46.23 N 79.72 W
45154	North Channel East	46.05 N 82.64 W
45159	Grimsby	43.23 N 79.47 W
45160	16-Mile Creek	43.42 N 79.63 W
46004	Middle Nomad	50.93 N 136.10 W
46036	South Nomad	48.35 N 133.94 W
46131	Sentry Shoal	49.91 N 124.99 W
46132	South Brooks	49.74 N 127.93 W
46134	Pat Bay	48.66 N 123.48 W
46145	Central Dixon Entrance Buoy	54.38 N 132.45 W
46146	Halibut Bank	49.34 N 123.73 W
46147	South Moresby	51.83 N 131.22 W
46181	Nanakwa Shoal	53.83 N 128.83 W
46183	North Hecate Strait	53.62 N 131.10 W
46184	North Nomad	53.91 N 138.85 W
46185	South Hecate Strait	52.42 N 129.81 W
46204	West Sea Otter	51.37 N 128.75 W
46205	West Dixon Entrance	54.16 N 134.28 W
46206	La Perouse Bank	48.84 N 126.00 W
46207	East Dellwood	50.87 N 129.92 W
46208	West Moresby	52.52 N 132.68 W

CaroCOOPS Stations

41024	Sunset Nearshore (SUN 2)	33.83 N 78.48 W
41029	Capers Nearshore (CAP 2)	32.81 N 79.63 W
41030	Capers Mid-Shelf (CAP 3)	32.52 N 79.34 W
41033	Fripp Nearshore (FRP 2)	32.28 N 80.41 W

COMPS Stations

42013	NA2 - Navy-2	27.16 N 82.95 W
42014	W. FL Sea-Coos	25.25 N 82.21 W
42021	CMP4 - Pasco County Buoy, FL	28.30 N 83.30 W
42022	CMP24 - West Florida Central Buoy	27.50 N 83.72 W
42023	CM3 - West Florida South Buoy	26.05 N 83.07 W
42024	W. FL MERHAB	27.46 N 84.22 W
anmf1	ANM - Anna Maria, FL	27.54 N 82.74 W

arpf1	APK - Aripeka, FL	28.43 N 82.66 W
egkf1	EGK - Egmont Key, FL	27.60 N 82.76 W
hssf1	HOM - Homosassa, FL	28.77 N 82.71 W
nfbf1	NFB - Northwest Florida Bay, FL	25.08 N 81.09 W
ptrf1	PAS -Port Richey, FL	28.28 N 82.73 W
shpf1	SHP - Shell Point, FL	30.06 N 84.29 W
tarf1	TAS - Tarpon Springs, FL	28.15 N 82.75 W

CORIE Stations

dmno3	Desdemona Sands Light, OR	46.23 N 123.96
mlto3	Marsh Island, OR	46.21 N 123.62

Forest Oil Stations

fgbl1	Forest Oil - High Island - HI-334B	28.12 N 93.67 W
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GoMOOS Stations

44024	Buoy N - Northeast Channel	42.31 N 65.93 W
44029	Buoy A0102 - Mass. Bay/Stellwagen	42.52 N 70.57 W
44030	Buoy B0102 - Western Maine Shelf	43.18 N 70.43 W
44031	Buoy C0201 - Casco Bay	43.57 N 70.06 W
44032	Buoy E0104 - Central Maine Shelf	43.72 N 69.36 W
44033	Buoy F0103 - West Penobscot Bay	44.06 N 69.00 W
44034	Buoy I0103 - Eastern Maine Shelf	44.11 N 68.11 W
44035	Buoy J0201 - Cobscook Bay	44.89 N 67.02 W
44036	Buoy K0102 - Saint John	45.20 N 66.02 W
44037	Buoy M0102 - Jordan Basin	43.49 N 67.88 W
44038	Buoy L0102 - Scotian Shelf	43.62 N 66.55 W

Irish Stations

62090	M1 - 50 NM West of Aran Islands	53.13 N 11.20 W
62091	M2 - 20 NM East of Lambay	53.47 N 05.42 W
62092	M3 - 30 NM Southwest of Mizen Head	51.22 N 10.55 W
62093	M4 - Donegal Bay	54.67 N 09.07 W
62094	M5 - South East	51.69 N 06.70 W

Long Island Sound Ferry Stations

bhrc3	Bridgeport Terminal, CT	41.18 N 73.19 W
fwic3	Fayerweather Island, CT	41.15 N 73.17 W
misc3	North Middle Sound, CT	41.07 N 73.13 W
misn6	South Middle Sound, NY	41.05 N 73.12 W
ncsc3	North Central Sound, CT	41.10 N 73.15 W
nosc3	Northern Open Sound, CT	41.12 N 73.16 W
ofpn6	Old Field Island, NY	40.97 N 73.08 W
ptjn6	Port Jefferson, NY	40.95 N 73.07 W
scsn6	South Central Sound, NY	41.02 N 73.11 W
sosn6	Southern Open Sound, NY	41.00 N 73.10 W

LSU Stations

ildl1	Isle Dernieres, LA / CSI05	29.05 N 90.53 W
mrsl1	Marsh Island, LA / CSI03	29.44 N 92.06 W
sipm6	Ship Island Pass, MS / CSI13	30.27 N 89.02 W
slpl1	Salt Point, LA / CSI14	29.52 N 91.55 W
sp1l1	South Timbalier Block 52, LA /CSI06	28.87 N 90.48 W

LUMCOM Stations

lkpl1	Western Lake Ponchartrain, LA	30.31 N 90.28 W
luml1	LUMCON Marine Center, LA	29.25 N 90.66 W
taml1	Tambour Bay, LA	29.19 N 90.67 W
trbl1	Terrebonne Bay, LA	29.17 N 90.58 W

Meteo France Stations

41100	Lesser Antilles	15.90 N 57.90 W
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41101	East of Martinique	14.6 N 56.2 W
61001	Nice Buoy	43.40 N 7.80 E
61002	Lion Buoy	42.10 N 4.70 E
62052		48.50 N 5.60 W

MYSound Stations

44022	Execution Rocks	40.88 N 73.73 W
44039	Central Long Island Sound	41.14 N 72.66 W
44040	Western Long Island Sound	40.96 N 73.58 W
ldlc3	New London Ledge - Ledge Light Weather Station	41.31 N 72.08 W

National Ocean Service Stations

acyn4	8534720 Atlantic City, NJ	39.36 N 74.42 W
batn6	8518750 The Battery, NY	40.70 N 74.02 W
bgnn4	8519483 Bergen Point West Reach, NY	40.64 N 74.15 W
bhbm3	8443970 Boston, MA	42.36 N 71.05 W
bltm3	8447387 Borden Flats Light at Fall River, MA	41.71 N 71.17 W
brhc3	8467150 Bridgeport, CT	41.17 N 73.18 W
bufn6	9063020 Buffalo, NY	42.88 N 78.89 W
bzbm3	8447930 Woods Hole, MA	41.52 N 70.67 W
casm1	8418150 Portland, ME	43.66 N 70.25 W
cman4	8536110 Cape May, NJ	38.97 N 74.96 W
cmti2	9087044 Calumet, IL	41.73 N 87.54 W
cptr1	8452944 Conimicut Light, RI	41.72 N 71.34 W
dtslm4	9075099 De Tour Village, MI	45.99 N 83.90 W
dulm5	9099064 Duluth, MN	46.78 N 92.09 W
foxr1	8454000 Providence, RI	41.81 N 71.35 W
frvm3	8447386 Fall River, MA	41.71 N 71.16 W
ftgm4	9014098 Fort Gratiot, MI	43.01 N 82.42 W
gdmm5	9099090 Grand Marais, MN	47.75 N 90.34 W
hrbm4	9075014 Harbor Beach, MI	43.85 N 82.64 W
kptn6	8516945 Kings Point, NY	40.81 N 73.78 W
ldtm4	9087023 Ludington, MI	43.95 N 86.44 W
lwsd1	8557380 Lewes, DE	38.78 N 75.12 W
mcmc4	9099018 Marquette C.G., MI	46.55 N 87.38 W
mtkn6	8510560 Montauk, NY	41.05 N 71.96 W
nlnc3	8461490 New London, CT	41.36 N 72.09 W
ntkm3	8449130 Nantucket Island, MA	41.29 N 70.10 W
nwhc3	8465705 New Haven, CT	41.28 N 72.91 W
nwpri1	8452660 Newport, RI	41.51 N 71.33 W
osgn6	9052030 Oswego, NY	43.46 N 76.51 W
phbp1	8545240 Philadelphia, PA	39.93 N 75.14 W
psbm1	8410140 Eastport, ME	44.90 N 66.99 W
ptcrl1	8452951 Potter Cove, Prudence Island, RI	41.64 N 71.34 W
ptim4	9099004 Point Iroquois, MI	46.49 N 84.63 W
qptr1	8454049 Quonset Point, RI	41.59 N 71.41 W
rckm4	9076024 Rock Cut, MI	46.27 N 84.19 W
sduhn4	8531680 Sandy Hook, NJ	40.47 N 74.01 W
swpm4	9076070 S.W. Pier, MI	46.50 N 84.37 W

NAVO Stations

46541	Drifting Buoy	43.1 N 127.0 W
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NC-COOS Stations

secg1	U.S. Navy Tower R4	30.80 N 80.32 W
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Scripps Stations

31201	Floripa, Brazil (109)	27.70 S 48.13 W
46211	Grays Harbor, WA (036)	46.86 N 124.24 W
46212	Humboldt Bay South Spit, CA (128)	40.75 N 124.31 W
46213	Cape Mendocino, CA (094)	40.29 N 124.74 W
46214	Point Reyes, CA (029)	37.57 N 123.28 W

46215	Diablo Canyon, CA (076)	35.21 N 120.86 W
46216	Goleta Point, CA (107)	34.33 N 119.80 W
46217	Anacapa Passage, CA (111)	34.17 N 119.43 W
46218	Harvest, CA (071)	34.45 N 120.78 W
46219	San Nicolas Island, CA (067)	33.22 N 119.88 W
46220	El Porto, CA (125)	33.90 N 118.46 W
46221	Santa Monica Bay, CA (028)	33.85 N 118.63 W
46222	San Pedro, CA (092)	33.62 N 118.32 W
46223	Dana Point, CA (096)	33.46 N 117.77 W
46224	Oceanside Offshore, CA (045)	33.18 N 117.47 W
46225	Torrey Pines Outer, CA (100)	32.93 N 117.39 W
46226	Point La Jolla, CA (095)	32.85 N 117.35 W
46227	Point Loma, CA (091)	32.63 N 117.44 W
46228	Pitas Point, CA (130)	34.32 N 119.42 W
51201	Waimea Bay, HI (106)	21.67 N 158.12 W
51202	Mokapu Point, HI (098)	21.42 N 157.68 W
52200	Ipan, Guam (121)	13.54 N 144.79 W
1jpc1	La Jolla, CA (073)	32.87 N 117.26 W

Skidaway Stations

skmg1	U.S. Navy Tower M2R6	31.53 N 80.24 W
spag1	U.S. Navy Tower R2	31.38 N 80.57 W
tybg1	U.S. Navy Tower R8	31.63 N 79.92 W

Stevens Institute Stations

acmn4	Atlantic City Marina, NJ	39.38 N 74.42 W
avan4	Avalon, NJ	39.09 N 74.72 W
brbn4	Brant Beach, NJ	39.61 N 74.20 W

TABS Stations

42043	GA-252 TABS B	28.99 N 94.90 W
42044	PS-1126 TABS J	26.11 N 97.03 W
42045	PI-745 TABS K	26.13 N 96.31 W
42046	HI-A595 TABS N	27.53 N 94.02 W
42047	HI-A389 TABS V	27.54 N 93.36 W

TCOON Stations

babt2	068: Baffin Bay; Point of Rocks, TX	27.30 N 97.42 W
glpt2	021: Galveston Pleasure Pier; Gulf of Mexico	29.29 N 94.79 W
nwst2	098: NWS Weather Station 1; Gulf of Mexico	27.75 N 96.77 W
pcnt2	057: Matagorda Bay; Port O'Connor, TX	28.45 N 96.40 W
rsjt2	003: Rincon del San Jose; Potrero Lopeno SW, TX	26.80 N 97.47 W
rtot2	100: RTNS Offshore, TX	27.76 N 96.98 W

United Kingdom Stations

62001	Gascogne Buoy	45.20 N 05.00 W
62026	K17 Buoy	55.30 N 01.10 E
62029	K1 Buoy	48.70 N 12.40 W
62051		49.50 N 00.20 W
62081	K2 Buoy	51.00 N 13.30 W
62103	Channel Lightship	49.90 N 02.90 W
62105	K4 Buoy	54.54 N 12.36 W
62106	RARH Buoy	57.00 N 09.90 W
62107	Sevenstones Lightship	50.10 N 06.10 W
62108	K3 Buoy	53.50 N 19.50 W
62109	K16 Buoy	57.00 N 00.00 E
62120		56.40 N 02.10 E
62130		53.00 N 01.70 E
62141		58.50 N 01.20 E
62142		53.00 N 02.10 E

62143		61.80 N 02.20 W
62144		53.40 N 01.70 E
62145		53.10 N 02.80 E
62147		57.60 N 01.70 E
62155		60.60 N 01.60 E
62163	Brittany Buoy	47.50 N 08.50 W
62164		57.20 N 00.50 E
62166		57.20 N 00.50 E
62202		52.20 N 03.80 E
62301	Aberporth Buoy (Cardigan Bay)	52.30 N 04.50 W
62303	Turbot Bank Buoy	51.60 N 05.10 W
62304	Sandettie Lightship	51.10 N 01.80 E
62305	Greenwich Lightship	50.40 N 00.00 E
63101		61.20 N 00.90 E
63104		61.20 N 01.60 E
63105		61.00 N 01.70 E
63110		59.50 N 01.50 E
63112		61.10 N 01.00 E
63113		61.00 N 01.70 E
63117		58.00 N 01.10 E
64045	K5 Buoy	59.10 N 11.40 W
64046	K7 Buoy	60.70 N 04.50 W

Further information see: <http://www.nws.noaa.gov/om/marine/home.htm>

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified Apr 13, 2005
Document URL: <http://weather.noaa.gov/pub/fax/buoydata.txt>
<ftp://weather.noaa.gov/fax/buoydata.txt>

Marine Forecasts and Related Information Available via E-mail

National Weather Service (and other) marine forecasts are available via a variety of Government, University, Commercial and Public/Freeware systems intended to make information accessible to users such as mariners who may have an e-mail capability but do not have direct Internet access. The following is a listing of several known automated systems.

Note: Any reference to any product or service does not imply any endorsement by the National Weather Service as to function or suitability for your purpose or environment.

This document (<http://weather.noaa.gov/pub/fax/robots.txt>) may be retrieved via e-mail as follows:

```
Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body: open
       cd fax
       get robots.txt
       quit
```

FTPMAIL

National Weather Service marine text forecasts, radiofax charts and buoy observations are available via e-mail via an FTPMAIL server. Further, FTPMAIL may be used to acquire any file on a *.noaa.gov FTP server. The FTPMAIL server is intended to allow Internet access for mariners and other users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. Turnaround is generally less than one hour, however, performance may vary widely and receipt cannot be guaranteed. To get started in using the NWS FTPMAIL service, follow these simple directions to obtain the FTPMAIL "help" file (11 KBytes), or see <http://weather.noaa.gov/pub/fax/ftpmail.txt>

```
Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body: help
```

Not all NWS forecast products are available via FTP and therefore accessible via FTPMAIL such as worldwide computer generated model forecasts which include areas beyond the area of U.S. forecasting responsibility such as the Indian Ocean and South Atlantic. To retrieve Wave Watch III (http://polar.ncep.noaa.gov/waves/main_table.html) and other forecasts via e-mail, use one of the www-to-email systems such as SAILDOCS or OTHERS described below. Be aware computer generated products from forecast models are not reviewed by forecasters and are therefore subject to error. E.G. per the Wave Watch III webpage:

URLs = http://polar.ncep.noaa.gov/waves/latest_run/xxxx.yyyzzzz

where xxxx =
"nww3_at" Atlantic
"nww3_na" North Atlantic
"wna" Western North Atlantic
"wna_ecg" WNA US coastal zoom
"nah" North Atlantic Hurricane
"nah_ecg" NAH US coastal zoom
"nww3_in" Indian Ocean

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"nww3_pa"    Pacific
"nww3_np"    North Pacific
"enp"        Eastern North Pacific
"enp_haw"    ENP Hawaii zoom
"enp_wc"     ENP west coast zoom
"nph"        North Pacific Hurricane
"nph_haw"    NPH Hawaii zoom
"nph_wc"     NPH west coast zoom
"akw"        Alaskan Waters
```

where "yyyy" = "h006" or "h000" for -6 or zero hour hindcasts
where "yyyy" = "f006" to "f180" (multiples of 6 hours) for forecasts

where "zzzz" =
.gif" Wave Height Forecast
.2.gif" Wave Period and Direction Forecast
.3.gif" Wind Speed and Direction Forecast

e.g. 24hr Wind Speed and Direction Forecast for North Atlantic =
http://polar.ncep.noaa.gov/waves/latest_run/nww3_na.f024h.3.gif
(See SAILDOCS or OTHERS described below to retrieve via e-mail,
file size ~ = 30k Bytes)

National Hurricane Center Listserver

The National Weather Service's National Hurricane Center operates an e-mail listserver which is special interest to mariners who do not have direct access to the World Wide Web but who are equipped with an e-mail system. This listserver provides an automated means to receive NWS hurricane forecast products via e-mail. However, performance may vary and receipt cannot be guaranteed. This is an experimental service. Interruptions or duplications in e-mail deliveries while we test the system are to be expected. To get started in using the National Hurricane Center Listserver, follow these simple directions for more information, or see: <http://www.nhc.noaa.gov/signup.shtml>

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body: open
cd fax
get nhclist.txt
quit

University of Illinois Listserver

The University of Illinois at Urbana-Champaign operates an e-mail listserver of which two Lists, WX-ATLAN, and WX-TROPL are of special interest to mariners who do not have direct access to the World Wide Web but who are equipped with an e-mail system. These Lists provide an automated means to receive NWS hurricane (and some marine) forecast products via e-mail. However, performance may vary and receipt cannot be guaranteed. To get started in using the University of Illinois Listserver, follow these simple directions to obtain further information, or see: <http://www.lsoft.se/scripts/wl.exe?XH=LISTSERV.UIUC.EDU>

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body: open
cd fax
get uiuclist.txt
quit

Hurricane Watch Net YahooGroup Listserver

The Amateur Radio "HAM" Hurricane Watch Net manages two YahooGroup Lists, HWN, and hwn_epac , which are of special interest to mariners who do not have direct access to the World Wide Web but who are equipped with an e-mail system. These Lists provide an automated means to receive NWS hurricane forecast products via e-mail. However, performance may vary and receipt cannot be guaranteed. Due to a system limitation, duplicate e-mails are likely. To get started in using the HWN/hwn_epac YahooGroup Listserver, follow these simple directions to obtain further information, or see: <http://www.hwn.org/>, <http://groups.yahoo.com/group/HWN> and http://groups.yahoo.com/group/hwn_epac

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body:
open
cd fax
get hwnlist.txt
quit

SAILDOCS

SAILDOCS is an email-based document-retrieval system which currently offers two services: a document retrieval service which will return documents from the Internet or SAILDOCS own files, and a subscription service which will send Internet documents (for example weather reports) at scheduled intervals. SAILDOCS files include National Weather Service text forecasts and gridded binary (GRIB files) for wind, pressure, 500mb, and sea surface temperature. SAILDOCS is supported in part by Sailmail (www.sailmail.com) but is an independent service that can be used by anyone who agrees to the terms and conditions. To get started in using SAILDOCS, follow these simple directions to obtain further information, or see: <http://www.saildocs.com/>

Send an e-mail to: info@saildocs.com
Subject line: Put anything you like
Body: Put anything you like

NAVIMAIL

Météo-France's NAVIMAIL system enables you to receive gridded binary (GRIB files) for wind, pressure, waves, sea surface temperature, as well as text bulletins and satellite images. There is a service charge for GRIB data, however, text bulletins and satellite images are available at no charge. To get started in using NAVIMAIL, follow these simple directions to obtain further information, or see:
<http://www.meteo.fr/marine/navimail>

Send an e-mail to: ftpmail@weather.noaa.gov
Subject line: Put anything you like
Body:
open
cd fax
get navimail.txt
quit

U.S. NOTICES TO MARINERS BY E-MAIL

The National Geospatial-Intelligence Agency (NGA) provides a service whereby the U.S Notices to Mariners are e-mailed to the

requesting address every weekend, with the following limitations:

- * The notice transmitted is listed on the Maritime Safety Information (MSI) Website in the "Notice to Mariners" section as "Entire NtM". Graphics provided in this version are inadequate for navigation purposes. Navigation-quality chartlets are available for download on the MSI website as needed.
- * Many networks and e-mail applications have restrictions on file sizes for e-mail attachments. In order to ensure all notices are received, the limit on file sizes for the receiving account should be changed to 2.5 Mb. Contact your system administrator or help desk for more assistance.
- * In order to subscribe, the customer must be logged into the e-mail account to which they wish the notice sent. When the hyperlink below is selected, an e-mail window is generated with the "To" and "From" addresses filled out. The "Subject" and "Body" will be blank. Selecting "Send" subscribes the user to the e-mailed Notice to Mariners.
- * Instructions to unsubscribe from the notice are included in each Notice to Mariners e-mail.

Privacy Act Advisory

Your e-mail address will be used for the purpose of electronically mailing the U.S. Notice to Mariners to you. Upon receipt of your subscription, your identification as the sender will be stripped from your e-mail and only the destination e-mail address you provide will be automatically added to the subscription list. Subscriptions will be processed automatically. If you unsubscribe, your e-mail address will be purged from the file and will not be retained. NGA may collect statistical data about the number of subscribers, number of subscription cancellations, and the number of delivery failures.

To subscribe to U.S. Notices to Mariners by E-mail:
Send an e-mail to: join-ntm@goldweb.nga.mil
Subject line: Leave blank
Body: Leave blank

U.S. COAST GUARD LOCAL NOTICES TO MARINERS (LNM) LISTSERVER
LNM's and other maritime related information are available via a one-way listserver at: <http://www.navcen.uscg.gov/lnm/listserver.htm>

NANUS & GPS STATUS MSGS BY EMAIL

Users with an urgent need to be notified of changes to the GPS Constellation may subscribe to the Navigation Center NANU List Server (<http://ccls.uscg.mil/mailman/listinfo/nanu>) and/or the GPS Status Message List Server (<http://ccls.uscg.mil/mailman/listinfo/gps>). These services provide emails containing the NANU and/or GPS Status Messages, generally within 60 minutes of notification by the Air Force of a change to the GPS Constellation. This is a free service. PRIVACY INFORMATION: Disclosure of your email address is voluntary. It is solicited for the sole purpose of delivering the requested information to you and will not be released to any other party.

OTHERS

A non-NWS FAQ webpage describing several FTP-to-EMAIL and WWW-to-EMAIL servers may be found at:
<http://www.faqs.org/faqs/internet-services/access-via-email/>

If you have access to the World Wide Web be certain to check out

the following webpages. See these pages for further links.

<http://www.nws.noaa.gov>

NWS Homepage

<http://www.nws.noaa.gov/om/marine/home.htm>

NWS Marine Page

Author: Timothy Rulon timothy.rulon@noaa.gov
Marine and Coastal Weather Services Branch W/OS21
National Weather Service
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<ftp://weather.noaa.gov/fax/robots.txt>

AMVER/SEAS

In Pursuit of Safety At Sea

Under a cooperative agreement between the National Oceanic and Atmospheric Administration (NOAA) and the U. S. Coast Guard (USCG), software has been created to assist Volunteer Observing Ships (VOS) in submitting marine weather reports and participating in the Automated Mutual-assistance Vessel Rescue system (AMVER). The VOS program allows ships to report marine weather to the National Weather Service (NWS) so that high seas forecasts will be as timely and accurate as possible. The AMVER system allows ships to report their intended track so that in the event of an emergency all available resources may be focused on aiding ships in distress. Both of these systems are voluntary and are intended to aid all mariners on the high seas. All transmission costs are paid by the U.S. Coast Guard and NOAA. The ship is not responsible for any transmission costs, provided messages are sent to the address specified in the user's guide.

NOAA's SEAS (Shipboard Environmental data Acquisition System) program relies on volunteer observers to report weather at least four times per day at 00Z, 06Z, 12Z, and 18Z. Ships are encouraged to also submit reports at 03Z, 09Z, 15Z and 21Z. In addition, a very limited number of ships are asked to collect oceanographic data. For these ships, a SEAS field representative installs the extra hardware needed and trains the crew in collecting and transmitting the data. Portions of the software needed for these observations are password protected to eliminate confusion.

AMVER reports allow the U. S. Coast Guard to track a vessel's position. The AMVER program relies on ships to submit four types of reports: (1) Sail Plans; (2) Position Reports; (3) Arrival Reports and (4) Deviation Reports, when necessary. The U. S. Coast Guard updates their database with the position information from these reports, which allows them to identify vessels in the vicinity of a ship in distress.

Ships may participate in either the AMVER or SEAS program, but there are benefits to participating in both. A ship can reduce reporting requirements, since AMVER position reports are created from every weather message and automatically forwarded to the U.S. Coast Guard.

A typical voyage would require the submission of an AMVER Sail Plan before departure, submissions of weather reports four times per day and the submission of an Arrival Report upon arrival. A Deviation Report is only submitted if the ship deviates from its original plan. Ships that follow the same routes repeatedly get an additional benefit since Sail Plans can be stored in the system and recalled and modified rather than creating new ones.

The AMVER/SEAS PC software was developed for use with INMARSAT C transceivers. For those ships already participating in the SEAS program, GOES transmitters will continue to work for the transmission of SEAS observations. To participate in the AMVER program the ship must possess an INMARSAT C transmitter with a floppy drive and the ability to send messages in binary format, and a 286 (or better) IBM compatible PC.

A Windows 95/98/00/ME/NT/XP version of AMVER/SEAS is now available.

For Information on SEAS contact:

Your nearest U.S. Port Meteorological Officer or SEAS representative listed in the Appendix.

For Information on AMVER contact:

Rick Kenney 1-212-668-7762
e-mail: rkenney@battery.navy.uscg.mil

or visit the SEAS website at:

<http://seas.amverseas.noaa.gov/seas/>

MAROB

An Experimental Voluntary Marine Observation Program

All Information with Respect to the MAROB Program Are Preliminary and Subject to Revision

The MAROB Program is an experimental voluntary marine observation program of the National Weather Service in the early stages of development. It seeks the participation of all mariners, both commercial and recreational, which are not part of the more in-depth VOS program. It is the goal of the program to collect as many marine observations as practicable, to improve the accuracy of coastal, offshore and high seas forecasts, by taking advantage of technological advancements in marine communications and the proliferation of the Internet.

MAROB observations will be in coded form which can be better ingested, distributed and displayed by forecasters than observations in plain language. The MAROB report format will be identical to VOS coded reports, with the exception that "MAROB" will replace "BBXX". The MAROB program will differ from the VOS Program in at least several other aspects: Although MAROBs will be used by forecasters in forecast decision process, these data will likely not be used directly by computer models; Any communications charges and the cost of any observing equipment will not be reimbursed by the Weather Service; The observation elements collected will typically be a subset of those collected in the full VOS report.

The National Weather Service is in the process of developing cooperative arrangements with organizations such as the United States Power Squadrons, the Coast Guard Auxiliary, the WinLink 2000 Global Radio Network, the Maritime Mobile Service Network, CruiseEmail.com, Ocens, Sailmail, SkyMate, MarineNet Wireless, and the YOTREP Reporting System, to both train observers and forward observations to NWS. Technologies utilized may include cellular telephone, HF Marine radio, MF Marine radio, VHF Marine Radio, Ham Radio, Webforms and e-mail.

In several cases, MAROB reporting schemes will work in conjunction with vessel position reporting systems such as WinLink's Position Reporter, the Maritime Mobile Service Network's ShipTrak, and the YOTREPs Reporter, to enhance the safety of mariners.

At present, mariners may participate in the MAROB program in any of several ways.

For information on the MAROB Program see:

<http://www.nws.noaa.gov/om/marine/marob.htm>

Or contact:
timothy.rulon@noaa.gov
1-301-713-1677 x 128

For information on other marine observation programs of the National Weather Service see:

<http://www.nws.noaa.gov/om/marine/voluntary.htm>

Note: Any reference to a commercial product or service does not imply any endorsement by the National Weather Service as to function or suitability for your purpose or environment.

USEFUL MARINE WEATHER PUBLICATIONS

Marine Service Charts (MSC) - \$1.25¹

Marine Service Charts (MSC) list frequencies, schedules and locations of stations disseminating NWS products. They also contain additional weather information of interest to the mariner. Charts are also available via the Internet at: <http://www.nws.noaa.gov/om/marine/pub.htm>.

<u>Location</u>	<u>Number</u>
Eastport, ME to Montauk Point, NY	MSC-1
Montauk Point, NY to Manasquan, NJ	MSC-2
Manasquan, NJ to Cape Hatteras, NC	MSC-3
Cape Hatteras, NC to Savannah, GA	MSC-4
Savannah, GA to Apalachicola, FL	MSC-5
Apalachicola, FL to Morgan City, LA	MSC-6
Morgan City, LA to Brownsville, TX	MSC-7
Mexican Border to Point Conception, CA	MSC-8
Point Conception, CA to Point St George, CA	MSC-9
Point St George, CA to Canadian Border	MSC-10
Great Lakes	MSC-11/12
Hawaiian Waters	MSC-13
Puerto Rico and Virgin Islands	MSC-14
Alaskan Waters	MSC-15
Guam and the Northern Mariana Islands	MSC-16

OTHER PUBLICATIONS OF VALUE TO THE MARINER

Mariner's Weather Log Magazine - \$13.00/2 issues/yr (\$18.20 foreign)³

Selected Marine Worldwide Weather Broadcasts (9/92)⁵

Voluntary Observing Ship Program Brochure (1999) Free⁶

NWS Observing Handbook NO.1 (7/04)⁶

Worldwide Marine Radiofacsimile Broadcast Schedules (06/05)⁴

NOAA Weather Radio Brochure (NOAA/PA 94070, 3/97) Free²

NOAA Weather Radio Handout (NOAA/PA 94061, 3/97) Free²

A Mariners Guide to Marine Weather Services - Great Lakes (NOAA/PA 98053) Free²

A Mariners Guide to Marine Weather Services - Coastal, Offshore, and High Seas (NOAA/PA 98054) Free²

Safe Boating Weather Tips (NOAA/PA 94058, 6/98) Free²

World Meteorological Organization Publication 9 - Weather Reporting, Volume D - Information for Shipping (Broadcast Schedules)¹⁵

National Ocean Service Coast Pilot, Volumes 1-9¹

NGA Publication 117 "Radio Navigational Aids" (2005)...Includes CD¹³

American Practical Navigator (Bowditch) Publication 9 (2002)¹³

Pilot Chart Atlas - 5 areas¹³

Sailing Directions - 42 volumes¹³

U.S. Notices to Mariners¹⁴

U.S. Notices to Mariners #1, Special Notice to Mariners Paragraphs¹⁴

Summary of Notice to Mariners Corrections¹³

The Future in Marine Radio Communications - GMDSS (1998) Free⁹

Maritime Navigational Safety Information Sources, (9/94) \$8⁷

Maritime Radio Users Handbook (1992) \$12⁷

The British Admiralty List of Radio Signals⁸

Volume 1 Coast Radio Stations (2 parts)

Volume 2 Radio Navigational Aids, Satellite Navigation Systems, Legal Time, Radio Time Signals & Electronic Fixing Systems

Volume 3 Maritime Safety Information Services
Volume 4 Meteorological Observation Stations
Volume 5 Global Maritime Distress and Safety Systems
Volume 6 Pilot Services, Vessel Traffic Services & Port Operations (5 parts)
Canadian Coast Guard Radio Aids to Navigation - \$18.95 Cdn¹⁶
Directory of Private Weather Services - Free¹⁰
TSUNAMI The Great Waves - Free¹¹
International SafetyNET Manual, 1994; IMO-908E¹²
NAVTEX Manual, 1994; IMO-951E¹²
GMDSS Handbook, 1995 (Includes GMDSS Master Plan); IMO-970E¹²
SOLAS Consolidated Edition, 1997; IMO-110E¹²
Mariners Guide for Hurricane Awareness in the North Atlantic Basin (large file 2.3 MB PDF format)
(<http://www.nhc.noaa.gov/marinersguide.pdf>)
U.S. NAVY Hurricane Havens/Heavy Weather Handbooks
(<https://www.cnmoc.navy.mil/nmosw/handbk.htm>)
Radiofacsimile Charts User's Guide (large file 2.2 MB PDF format)
(<http://www.opc.ncep.noaa.gov/UsersGuide/UG.pdf>)

1. FAA/National Aeronautical Charting Office

Distribution Division, AVN-530
6303 Ivy Lane, Suite 400
Greenbelt, MD 20770
(301) 436-8301
(800) 638-8972 toll free, U.S. only
(301) 436-6829 FAX
Email: 9-AMC-chartsales@faa.gov
<http://chartmaker.ncd.noaa.gov>
or your local chart agent: <http://chartmaker.ncd.noaa.gov/nsd/states.html>

2. Available Internet: Via <http://www.nws.noaa.gov/om/index.html>
Or from your local National Weather Service Forecast Office.

3. Superintendent of Documents

P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 512-1800 (7:30am-4:30pm EST)
(202) 512-2250 FAX
<http://www.gpo.gov>
<http://www.nws.noaa.gov/om/mwl/mwl.htm>
(Distributed free to ships in VOS program)

4. (Printed copies available only to ships participating in U.S. VOS program)

web version <http://www.nws.noaa.gov/om/marine/home.htm>

National Weather Service
Voluntary Observing Ship Technical Lead
Robert "Luke" Luke
NDBC Bldg #1100
Stennis Space Center, MS 39529
1-228-688-1457 1-228-688-3153 (fax)
robert.luke@noaa.gov
<http://www.vos.noaa.gov>

5. Joint Publication of National Weather Service and Naval Oceanography Command
Currently out of date, out of print, will no longer be available
Tim Rulon, NOAA
Marine Communications Program Manager
National Weather Service W/OS21
1325 East-West Highway
Silver Spring, MD 20910
1-301-713-1677 x128 1-301-713-1520 (fax)
timothy.rulon@noaa.gov
marine.weather@noaa.gov
<http://www.nws.noaa.gov/om/marine/home.htm>

6. (Some publications available only to ships participating in U.S. VOS program)
National Weather Service
Voluntary Observing Ship Technical Lead
Robert "Luke" Luke
NDBC Bldg #1100
Stennis Space Center, MS 39529
1-228-688-1457
1-228-688-3153 (fax)
robert.luke@noaa.gov
<http://www.vos.noaa.gov>

7. Radio Technical Commission for Maritime Services (RTCM)
1800 N. Kent St., Suite 1060
Arlington VA 22209
1-703-527-2000
1-703-351-9932 (FAX)
information@rtcm.org
<http://www.rtcm.org>
(New revisions in process)

8. UK Hydrographic Office
Admiralty Way, Tauton, Somerset
TA1 2DNm United Kingdom
+44(0) 1823 337900 x3333
+44(0) 1823 323753 FAX
info@hydro.gov.uk
<http://www.ukho.gov.uk>

9. Commandant (G-SCT)
U.S. Coast Guard
2100 Second Street S.W.
Washington, D.C. 20593
(202)-267-2860
(202)-267-4106 (FAX)
cgccomms@comdt.uscg.mil
<http://www.navcen.uscg.gov/marcomms/gmdss/#Brochure>
<http://www.navcen.uscg.gov/marcomms/marcomms.htm>

10. National Weather Service
Industrial Meteorology Staff
1325 East West Highway
Silver Spring, MD 20910
(301)-713-0258
(301)-713-0610
nws.im@noaa.gov
<http://www.nws.noaa.gov/im>

11. International Tsunami Information Center
737 Bishop St. Suite 2200
Honolulu, HI 96813-3213
808-532-6422
808-532-5576 (FAX)
itic@itc.noaa.gov
<http://www.nws.noaa.gov/pr/hq/itic.htm>
12. International Maritime Organization (IMO)
4 Albert Embankment
London SE1 7SR UK
+44 0171 7357611
+44 0171 5873210 FAX (general inquiries)
+44 0171 5873241 FAX (publication sales)
Telex: 23588
info@imo.org
<http://www.imo.org>
13. Superintendent of Documents
P.O. Box 371954
Pittsburgh, PA 15250-7954
(202) 512-1800 (7:30am-4:30pm EST)
(202) 512-2250 FAX
<http://www.gpo.gov>
Many NGA publications available at:
<http://pollux.nss.nima.mil/index/index.html>
14. No longer printed by U.S. Government, available on-line
http://164.214.12.145/untm/untm_j_options.html?class_flag=N
15. American Meteorological Society
Attn: WMO Publications Center
45 Beacon Street
Boston, MA 02108 USA
1-617-227-2425 Fax: 1-617-742-8718
wmopubs@ametsoc.org
<http://www.wmo.ch/web/catalogue/>
<http://www.wmo.int/web/ddbs/Jen/VolumeD/VolumeD/Volume%20D.pdf>
16. http://www.ccg-gcc.gc.ca/mcts-sctm/ramn_e.htm
RAMN's may be purchased at any Canadian Hydrographic Service Authorized Chart Dealer.

PORt METEOROLOGICAL OFFICERS

U.S. Port Meteorological Officers

Headquarters

Robert A. Luke
Voluntary Observing Ship Program Leader
National Data Buoy Center
Building Bldg. 3203, Room 305B
Stennis Space Center, MS 39529-6000
Tel: 228-688-1457
Fax: 228-688-3923
E-mail: [_46](#)

Jacksonville

John Warrelmann, PMO
National Weather Service, NOAA
13701 Fang Road
Jacksonville, FL 32218-7933
Tel: 904-741-5186 Ext. 117
Fax: 904-741-0078
E-mail: [john.warrelmann@noaa.gov](#)

Norfolk

Peter Gibino, PMO
National Weather Service, NOAA
4034-B Geo. Wash. Mem. Hwy.
Yorktown, VA 23692-2724
Tel: 757-877-1692
Fax: 757-877-9561
E-mail: [peter.gibino@noaa.gov](#)

Baltimore

James Saunders, PMO
National Weather Service, NOAA
Maritime Center I, Suite 287
2200 Broening Highway
Baltimore, MD 21224-6623
Tel: 410-633-4709
Fax: 410-633-4713
E-mail: [james.saunders@noaa.gov](#)

New Orleans

Paula Campbell, PMO
National Weather Service, NOAA
Louis Armstrong International Airport
Box 20026
New Orleans, LA 70141
Tel: 504-589-4839
E-mail: [paula.campbell@noaa.gov](#)

Honolulu

Port Everglades

Peggy Alander-, PMO
National Weather Service, NOAA
2550 Eisenhower Blvd, Suite 312
P.O. Box 165504
Port Everglades, FL 33316
Tel: 954-463-4271
Fax: 954-462-8963
E-mail: [peggy.alander@noaa.gov](#)

Charleston

Tim Kenefick, PMO
NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, SC 29405-2413
Tel: 843-740-1281
Fax: 843-740-1289
E-mail: [timothy.kenefick@noaa.gov](#)

New York

Jim Luciani, PMO
New York/New Jersey
National Weather Service, NOAA
110 Lower Main Street, Suite 201
South Amboy, NJ 08879-1367
Tel: 732-316-5409
Fax: 732-316-7643
E-mail: [james.luciani@noaa.gov](#)

Great Lakes

Amy Seeley, PMO
National Weather Service, NOAA
333 West University Dr.
Romeoville, IL 60446-1804
Tel: 815-834-0600 Ext. 269
Fax: 815-834-0645
E-mail: [amy.seeley@noaa.gov](#)

Houston

Chris Fakes, PMO
National Weather Service, NOAA
Houston Area Weather Office
1620 Gill Road
Dickinson, TX 77539-3409
Tel: 281-534-2640 Ext. 277
Fax: 281-337-3798
E-mail: [chris.fakes@noaa.gov](#)

Long Beach

Derek LeeLoy
Ocean Services Program Coordinator
National Weather Service Pacific Region HQ
Grosvenor Center, Mauka Tower
737 Bishop Street, Suite 2200
Honolulu, HI 96813-3201
Tel: 808-532-6439
Fax: 808-532-5569
E-mail: derek.leeloy@noaa.gov

Oakland

Robert Novak, PMO
National Weather Service, NOAA
1301 Clay Street, Suite 1190N
Oakland, CA 94612-5217
Tel: 510-637-2960
Fax: 510-637-2961
E-mail: bob.novak@noaa.gov

Kodiak

Richard Courtney
National Weather Service, NOAA
600 Sandy Hook Street, Suite 1
Kodiak, AK 99615-6814
Tel: 907-487-2102
Fax: 907-487-9730
E-mail: richard.courtney@noaa.gov

Anchorage

Larry Hubble
National Weather Service Alaska Region
222 West 7th Avenue #23
Anchorage, AK 99513-7575
Tel: 907-271-5135
Fax: 907-271-3711
E-mail: larry.hubble@noaa.gov

SEAS Field Representatives

GOOS Center Manager

Steve Cook
8604 La Jolla Shores Drive
La Jolla, CA 92037-1508
Tel: 858-546-7103
Fax: 619-546-7185
E-mail: steven.cook@noaa.gov

Pacific Northwest SEAS Rep.

Steve Noah
SEAS Logistics/PMC
Olympic Computer Services, Inc.
Tel: 360-385-2400
Cell: 425-238-6501
E-mail: snoah@olycomp.com
or KARSTENO@aol.com

Southeast Atlantic SEAS Rep.

Robert Webster, PMO
National Weather Service, NOAA
501 West Ocean Blvd., Room 4480
Long Beach, CA 90802-4213
Tel: 562-980-4090
Fax: 562-980-4089
E-mail: bob.webster@noaa.gov

Seattle

Patrick Brandow, PMO
National Weather Service, NOAA
7600 Sand Point Way, N.E.
BIN C15700
Seattle, WA 98115-6349
Tel: 206-526-6100
Fax: 206-526-4571 or 6094
E-mail: pat.brandow@noaa.gov

Valdez

Debra Russell, OIC
National Weather Service, NOAA
Box 427
Valdez, AK 99686-0427
Tel: 907-835-4505
Fax: 907-835-4598
E-mail: debra.russell@noaa.gov

Northeast Atlantic SEAS Rep.

Jim Farrington
SEAS Logistics/AMC
439 West York Street
Norfolk, VA 23510
Tel: 757-441-3062
Fax: 757-441-6495
E-mail: james.w.farrington@noaa.gov

Southwest Pacific SEAS Rep.

Carrie Wolfe
Southern California Marine Institute
820 S. Seaside Avenue
San Pedro, Ca 90731-7330
Tel: 310-519-3181
Fax: 310-519-1054
E-mail: hbbio048@csun.edu

Global Drifter Program

Ann-Marie Wilburn
AOML/GOSO Center
4301 Rickenbacker Causeway
Miami, FL 33149-1026
Tel: 305-361-4336
Fax: 305-361-4366
E-mail: wilburn@aoml.noaa.gov

NGA Fleet Liaison

Adam Veracka, Fleet Liaison Branch Head
QMCM Randy Bryant, Fleet Liaison Coordinator
ATTN: Mail Stop D-44
4600 Sangamore Road
Bethesda, MD 20816-5003
Tel: 301-227-3173/3146
Fax: 301-227-4211
E-mail: verackaa@nga.mil
bryanral@nga.mil

Other Port Meteorological Officers

Australia

Head Office

Graeme Ball, Manager
Marine Observations Group
Bureau of Meteorology
GPO Box 1289k
Melbourne, VIC 3001
Tel: +613 9669 4203
Fax: +613 9669 4168
E-mail: marine_obs@bom.gov.au
smmo@bom.gov.au

Melbourne

Albert Dolman, Port Meteorological Agent
Bureau of Meteorology
GPO Box 1636M
Melbourne, VIC 3001
Tel: +614 3858 7341
Fax: +614 5229 5432
E-mail: PMA.Melbourne@bom.gov.au

Canada

Nova Scotia

Randy Sheppard, PMO
Meteorological Service of Canada
16th Floor, 45 Aldernay Drive
Dartmouth, Nova Scotia B2Y 2N6
Tel: 902-426-6703
E-mail: randy.sheppard@ec.gc.ca

British Columbia

Michael Riley, PMO
Meteorological Service of Canada
700-1200 West 73rd Avenue

Craig Engler
AOML/PHOD
4301 Rickenbacker Causeway
Miami, FL 33149-1026
Tel: 305-361-4439
Fax: 305-361-4366
E-mail: craig.engler@noaa.gov

U.S. Coast Guard AMVER Center

Richard T. Kenney
AMVER Maritime Relations Officer
United States Coast Guard
Battery Park Building
New York, NY 10004
Tel: 212-668-7764
Fax: 212-668-7684
E-mail: rkenney@batteryyny.uscg.mil

Fremantle

Malcolm Young, Port Meteorological Agent
PO Box 1370
Perth, WA 6872
Tel: +618 9474 1974
Fax: +618 6210 1801
E-mail: PMA.Fremantle@bom.gov.au

Sydney

Captain Einion (Taffy) Rowlands, PMA
Bureau of Meteorology
GPO Box 413
Darlinghurst, NSW 1300
Tel: +612 9296 1547
Fax: +612 9296 1648
E-mail: PMA.Sydney@bom.gov.au

Newfoundland

Jack Cossar, PMO
Meteorological Service of Canada
6 Bruce Street
St. John's, Newfoundland A1N 4T3
Tel: 709-722-4798
Fax: 709-722-5097
E-mail: jack.cossar@ec.gc.ca

Ontario

Tony Hilton, Supervisor PMO
Rick Shukster, PMO
Roland Kleer, PMO

Vancouver, British Columbia V6P 6H9
Tel: 604-664-9136
Cell: 604-219-5832
Fax: 604-664-9195
E-mail: mike.riley@ec.gc.ca

Environmental Canada
Meteorological Service of Canada
100 East Port Blvd.
Hamilton, Ontario L8H 7S4
Tel: 905-312-0900
Fax: 905-312-0730
E-mail: tony.hilton@ec.gc.ca
roland.kleer@ec.gc.ca
rick.shukster@ec.gc.ca

Quebec

Eric Gola, PMO
Meteorological Service of Canada-Quebec Region
100 Alexis Nihon, Suite 300, 3rd Floor
Montreal, Quebec H4M 2N8
Tel: 514-283-1644
514-386-8269
Fax: 514-496-1867
E-mail: erich.gola@ec.gc.ca

China

YU Zhaoguo
Shanghai Meteorological Bureau
166 Puxi Road
Shanghai, China

Croatia

Port of Rijeka
Smiljan Viskovic
Marine Meteorological Office-Rijeka
Riva 20
HR-51000 Rijeka
Croatia
Tel: +385-51 215 548
Fax: +385-51 215 574

Port of Split

Captain Zeljko Sore
Marine Meteorological Office-Split
PO Box 370
Glagoljska 11
HR-21000 Split
Croatia
Tel: +385-21 589 378
Fax: +385-21 591 033
E-mail: sore@cirus.dhz.hr

Denmark

Commander Lutz O. R. Niegsch
PMO, Danish Meteorological Inst.
Lyngbyvej 100, DK-2100
Copenhagen, Denmark
Tel: +45 39157500
Fax: +45 39157300

Falklands

Captain R. Gorbutt, Marine Officer
Fishery Protection Office
Port Stanley
Falklands
Tel: +500 27260
Fax: +500 27265

France

Headquaters
André Périès, PMO Supervisor
Météo-France DSO/RESO/PMO
42, Avenue Gustave Coriolis
31057 Toulouse Cédex
France
Tel: +33-5 61 07 98 54
Fax: +33-5 61 07 98 69

Boulogne-sur-mer

Gérard Doligez
Météo-France DDM62
17, boulevard Sainte-Beuve
62200 Boulogne-sur-mer
France
Tel: +33-3 21 10 85 10
Tel: +33-3 21 33 33 12
E-mail: gerard.doligez@meteo.fr

Brest

Louis Stéphan, Station Météorologique
16, quai de la douane
29200 Brest
France
Tel: +33-2 98 44 60 21
Fax: +33-2 98 44 60 21

Le Réunion

Yves Morville, Station Météorologique
Port Réunion
France
Tel: +262 262 921 147
Fax: 916797RE
E-mail: dirre@metro.fr
meteo.france.leport@wanadoo.fr

Montoir de Bretagne

Jean Beaujard, Station Météorologique
Aérodome de Saint-Mazaire-Montoir
44550 Montoir de Bretagne
France
Tel: +33-2 40 17 13 17
Fax: +33-2 40 90 39 37

Germany

Headquarters

Volker Weidner, PMO Advisor
Peter Gollnow, PMO
Horst von Bargen, PMO
Deutscher Wetterdienst
Bernhard-Nocht-Strasse 76
D-20359 Hamburg
Germany
Tel: +49-40 6690 1410
+49-40 6690 1411
+49-40 6690 1412
Fax: +49-40 6690 1496
E-mail: pmo@dwd.de

Bremerhaven

Henning Hesse, PMO
Deutscher Wetterdienst
An der Neuen Schleuse 10b
D-27570 Bremerhaven
Germany
Tel: +49-471 70040-18
Fax: +49-471 70040-17
E-mail: pmo@dwd.de

Le Havre

André Devatine, Station Météorologique
Noveau Sémaphore
Quai des Abeilles
76600 Le Havre
France
Tel: +33-2 32 74 03 65
Fax: +33-2 32 74 03 61
E-mail: andre.devatine@meteo.fr

Marseille

Norbert Aouizerats
DDM 13
Centre Départmemntal des Bouches du Rhône
Météo-France
2 Bd du Château-Double
13098 Aix en Provence Cédex 02
France
Tel: +33-4 42 95 90 21
Fax: +33-4 42 95 90 29
E-mail: Norbert.Aouizerats@meteo.fr

New Caledonia

Henri Lévéque, Station Météorologique
BP 151
98845 Noumea Port
New Caledonia
France
Tel: +687 27 30 04
Fax: +687 27 42 95

Bremen

Ulrich Ranke, PMO
Deutscher Wetterdienst
Flughafendamm 45
D - 28199 Bremen
Germany
Tel: +49-421 5372 163
Fax: +49-421 5372 166
E-mail: pmo@dwd.de

Rostock

Christine Bergs, PMO
Christel Heidner, PMO
Deutscher Wetterdienst
Seestrasse 15a
D-18119 Rostock
Germany
Tel: +49 381 54388-30
+49 381 54388-31
Fax: +49 381 54388-63

Gibraltar

Principal Meteorological Officer
Meteorological Office
RAF Gibraltar
Gibraltar
Tel: +350 53419
Fax: +350 53474

E-mail: pmo@dwd.de

Greece

Michael Myrsilidis, Marine Meterology
Section
Hellenic National Meteorological
Service(HNMS)
El, Venizelou 14
16777 Hellinikon
Athens
Greece
Tel: +30-10 9699013
Fax: +30-10 9628952
+30-10 9649646
E-mail: mmirsi@hnms.gr

Hong Kong, China

Wing Tak Wong, Senior Scientific Officer
Hong Kong Observatory
134A Nathan Road
Kowloon
Hong Kong, China
Tel: +852 2926 8430
Fax: +852 2311 9448
E-mail: wtwong@hko.gov.hk

India

Calcutta

Port Meteorological Office
Alibnagar, Malkhana Building
N.S. Dock Gate No. 3
Calcutta 700 043
India
Tel: +91-33 4793167

Fort Mumbai

Port Meteorological Office
3rd Floor, New Labour Hamallage Building
Yellow Gate, Indira Doct
Fort Mumbai 400 001
India
Tel: +91-2613733

Kochi

Port Meteorological Office
Cochin Harbour, North End, Wellington Island
Kochi 682 009
India
Tel: +91-484 667042

Indonesia

Belawan

Stasiun Meteorologi Maritim Belawan
Jl. Raya Pelabuhan III
Belawan - 20414
Indonesia

Chennai

Port Meteorological Office
10th Floor, Centenary Building
Chennai Port Trust, Rajaji Road
Calcutta 600 001
India
Tel: +91-44 560187

Goa

PMO, Port Meteorological Liaison Office
Sada, P.O., Head Land Sada
Goa 403 804
India
Tel: +91-832 520012

Visakhapatnam

Port Meteorological Office
c/o The Director, Cyclone Warning Centre
Chinna Waltair
Calcutta 700 043
India
Tel: +91-891 746506

Bitung

Stasiun Meteorologi Maritim Bitung
Jl. Kartini No. 1
Bitung - 95524
Indonesia

Tel: +62-21 6941851
Fax: +62-21 6941851

Jakarta

Meteorological and Geophysical Agency
Jl. Angkasa I No. 2 Kemayoran
Jakarta - 10720
Indonesia
Tel: +62-21 4246321
Fax: +62-21 4246703

Makassar

Stasiun Meteorologi Maritim Makassar
Jl. Sabutung I No. 20 Paotere
Makassar
Indonesia
Tel: +62-411 319242
Fax: +62-411 328235

Surabaya

Stasiun Meteorologi Maritim Surabaya
Jl. Kalimas baru No. 97B
Surabaya - 60165
Indonesia
Tel: +62-31 3291439
Fax: +62-31 3291439

Ireland

Co. Donegal

Paddy Delaney, Station Manager
Met Eireann
Cork Airport
MalinHead
Lifford
Co. Donegal
Ireland

Cork

Brian Doyle, PMO
Met Eireann
Cork Airport
Cork
Ireland
Tel: +353-21 4917753
Fax: +353-21 4317405

Wexford

Dennis O. Mahoney, Station Manager
Met Eireann
Rossiare Harbour
Wexford
Ireland
Tel: +353-53 33113
Fax: +353-53 33105
E-mail: met.rossiarre@eircom.net

Tel: +62-438 30989
Fax: +62-438 21710

Jakarta

Stasiun Meteorologi Maritim Tanjung Priok
Jl. Padamarang Pelabuhan
Tanjung Priok
Jakarta - 14310
Indonesia
Tel: +62-21 4351366
Fax: +62-21 490339

Semarang

Stasiun Meteorologi Maritim Semarang
Jl. Deli Pelabuhan
Semarang - 50174
Indonesia
Tel: +62-24 3549050
Fax: +62-24 3559194

Co. Mayo

Andy Clohessy, Station Manager
Connaught International Airport
Charleston
Co. Mayo
Ireland

Dublin

Columba Creamer, Marine Unit
Met Eireann
Glasnevin Hill
Dublin 9
Ireland

Israel

Haifa

Hani Arbel, PMO
Haifa Port
Tel: 972 4 8664427

Ashdod

Aharon Ofir, PMO
Marine Department
Ashdod Port
Tel: 972 8 8524956

Japan

Headquarters

Dr. Kazuhiko Hayashi, Scientific Officer
Marine Div., Climate and Marine Dept.
Japan Meteorological Agency
1-3-4 Otemachi, Chiyoda-ku
Tokyo, 100-8122
Japan
Tel: +81-3 3212 8341 ext.5144
Fax: +81-3 3211 6908
Email: hayashik@met.kishou.go.jp
VOS@climar.kishou.go.jp

Nagoya

Port Meteorological Officer
Nagoya Local Meteorological Observatory
2-18, Hiyoricho, Chigusa-ku
Nagoya, 464-0039
Japan
Tel: +81-52 752 6364
Fax: +81-52 762-1242

Kobe

Port Meteorological Officer
Kobe Marine Observatory
1-4-3, Wakinohamakaigan-Dori, Chuo-ku
Kobe, 651-0073
Japan
Tel: +81-78 222 8918
Fax: +81-78 222 8946

Yokohama

Port Meteorological Officer
Yokohama Local Meteorological Observatory
99 Yamate-cho, Naka-ku
Yokohama, 231-0862
Japan
Tel: +81-45 621 1991
Fax: +81-45 622 3520
Telex: 2222163

Kenya

Ali J. Mafimbo, PMO
PO Box 98512
Mombasa
Kenya
Tel: +254-11 225687/433689
Fax: +254-11 433689
E-mail: mafimbo@lion.meteo.go.ke

Malaysia

Port Bintulu

Paul Chong Ah Poh, PMO
Bintulu Meteorological Station
P.O. Box 285
97007 Bintulu
Malaysia
Fax: +60-86 314 386

Port Klang

Mohd Shah Ani, PMO
Malaysian Meteorological Service
Jalan Sultan
46667 Petaling Jaya
Selangor
Malaysia
Fax: +60-3 7957 8046

Port Kinabalu

Mohd Sha Ebung, PMO
Malaysian Meteorological Service
7th Floor, Wisma Dang Bandang
P.O. Box 54
88995 Kota Kinabalu

Sabah
Malaysia
Fax: +60-88 211 019

Mauritius

Meteorological Services
St. Paul Road
Vacoas
Mauritius
Tel: +230 686 1031/32
Fax: +230 686 1033
E-mail: meteo@intnet.mu

New Zealand

Julie Fletcher, MMO
Meteorological Service New Zealand Ltd.
P.O. Box 722
Wellington
New Zealand
Tel: +64-4 4700 789
Fax: +64-4 4700 772

Pakistan

Hazrat Mir, Senior Meteorologist
Pakistan Meteorological Department
Meteorological Office
Jinnah International Airport
Karachi
Pakistan
Tel: +92-21 45791300, 45791322
Fax: +92-21 9248282
E-mail: pmdmokar@khi.paknet.com.pk

Philippines

Cagayan de Oro City
Leo Rodriguez
Pagasa Complex Station
Cagayan de Oro City 9000, Misamis Occidental
Philippines
Tel: +63-8822 722 760

Dumaguete City
Edsin Culi
Pagasa Complex Station
Dumaguete City Airport
Dumaguete City, Negros Orientale 6200
Philippines
Tel: +63-35 225 28 04

Iloilo City
Constancio Arpon, Jr.
Pagasa Complex Station
Iloilo City 5000
Philippines

Netherlands

Bert de Vries, PMO
René Rozeboom, PMO
KNMI, PMO-Office
Postbus 201
3730 AE De Bilt
Netherlands
Tel: +31-30 2206391
Fax: +31-30 2210849
E-mail: PMO-Office@knmi.nl

Norway

Tor Inge Mathiesen, PMO
Norwegian Meteorological Institute
Allegaten 70
N-5007 Bergen
Norway
Tel: +47-55 236600
Fax: +47-55 236703
Telex: 40427/42239

Davao City

Edwin Flores
Pagasa Complex Station, Bangoy Airport
Davao City 8000
Philippines
Tel: +63-82 234 08 90

Legaspi City

Orthello Estareja
Pagasa Complex Station
Legaspi City, 4500
Philippines
Tel: +63-5221 245 5241

Mactan City

Roberto Entrada
Pagasa Complex Station, Mactan Airport
Mactan City, CEBU 6016
Philippines

Tel: +63-33 321 07 78

Tel: +63-32 495 48 44

Manila

Dr. Juan D. Cordeta &
Benjamin Tado, Jr.
Pagasa Port Meteorological Office
PPATC Building, Gate 4
South Harbor
Manila 1018
Philippines 1100
Tel: +63-22 527 03 16

Poland

Józef Kowalewski, PMO
Institute of Meteorology and Water Mgt.
Waszyngtona 42
PL 81-342 Gdynia
Poland
Tel: +48-58 6204572
Fax: +48-58 6207101
E-mail: kowalews@stratus.imgw.gdynia.pl

Republic of Korea

Inchon
Inchon Meteorological Station
25 Chon-dong, Chung-gu
Inchon
Republic of Korea
Tel: +82-32 7610365
Fax: +82-51 4697012

Russian Federation

Ravil S. Fakhrutdinov
Roshydromet
12, Novovagan~Rkovsky Street
Moscow 123242
Russian Federation
Tel: +7-095 255 23 88
Fax: +7-095 255 20 90
Telex: 411117 RUMS RF
E-mail: marine@mcc.mecom.ru
fakhrutdinov@rhmc.mecom.ru

Singapore

Edmund Lee Mun San, PMS
Meteorological Service
PO Box 8
Singapore Changi Airport
Singapore 9181
Tel: 5457198
Fax: +65 5457192
Telex: RS50345 METSIN

South Africa

Headquarters
Ian T. Hunter
Manager: Maritime Services

Pusan

Pusan Meteorological Station
1-9 Taechong-dong, Chung-gu
Pusan
Republic of Korea
Tel: +82-51 4697008
Fax: +82-51 4697012

Saudi Arabia

Mahmoud M. Rajkhan, PMO
Meteorological and Environmental Protection
Administration (MEPA)
P.O. Box 1358
Jeddah 21431
Tel: +966-2 6512312 Ext. 2252 or 2564

Cape Town

C. Sydney Marais, PMO
Cape Town Regional Weather Office

South African Weather Service
Private Bag X097
Pretoria 0001
Tel: +27 (0) 12 367 6032
Fax: +27 (0) 12 367 6042
Weatherline: 082 162
E-mail: ian@weathersa.co.za
www.weathersa.co.za

Durban

Gus McKay, PMO
Durban Regional Weather Office
Durban International Airport
Durban 4029
South Africa
Tel: +27-31 408 1446
Fax: +27-31 408 1445
E-mail: mckay@weathersa.co.za

Sweden

Morgan Zinderland
SMHI
S-601 76 Norrköping, Sweden
Tel: 516-924-0499 (0227)

Thailand

Kesrin Hanprasert, Meteorologist
Marine and Upper Air Observation Section
Meteorological Observation Division
Thai Meteorological Department
4353 Sukhumvit Road, Bangna
Bangkok 10260
Thailand
Tel: +66-2 399 4561
Fax: +66-2 398 9838
E-mail: Wattana@fc.nrct.go.th

United Kingdom

Headquarters

Sarah C. North, Marine Networks Manager
Met Office
Observations Supply - Marine Networks
FitzRoy Road
Exeter
Devon
EX1 3PB
United Kingdom
Tel: +44-1392 855 617
Fax: +44-870 900 5050
E-mail: sarah.north@metoffice.com
Group E-mail: Obsmar@metoffice.gov.uk

South England

Captain Harry H. Gale, PMO &
Steve Key, PMO

Cape Town International Airport
Cape Town 7525
South Africa
Tel: + 27 21 934 0836
Fax: +27 21 934 3296
E-mail: maritime@weathersa.co.za

Tanzania, United Republic of

H. Charles Mwakitosi, PMO
P.O. Box 3056
Dar es Salaam
United Republic of Tanzania

North England

Colin B. Attfield, PMO
Met office
c/o 12 Brackley Close
Wallasey
Merseyside CH44 3EJ
United Kingdom
Tel: +44-151 638 8516
Fax: +44-870 900 5050
E-mail: pmoliverpool@metoffice.com

Scotland

Tony Eastham, PMO
Met Office

Met Office
Trident House
21 Berth, Tilbury Dock
Tilbury, Essex RM18 7HL
United Kingdom
Tel: +44-1375 859 970
Fax: +44-1375 859 972
e-mail: pmlondon@metoffice.com

Scotland

Ian J. Hendry, Offshore Adviser
Met Office
Davidson House Campus 1
Aberdeen Science & Technology Park
Bridge of Don
Aberdeen AB22 8GT
United Kingdom
Tel: +44-1224 407 557
Fax: +44-1224 407 568
E-mail: ihendry@metoffice.com

Saughton House, Broomhouse Drive
Edinburgh EH11 3XQ
United Kingdom
Tel: +44-131 528 7305
Fax: +44-131 528 7345
E-mail: pmoedinburgh@metoffice.com

NOAA WEATHER RADIO NETWORK

- (1) 162.550 mHz
- (2) 162.400 mHz
- (3) 162.475 mHz
- (4) 162.425 mHz
- (5) 162.450 mHz
- (6) 162.500 mHz
- (7) 162.525 mHz

Channel numbers, e.g. (WX1, WX2) etc. have no special significance but are often designated this way in consumer equipment. Other channel numbering schemes are also prevalent.

The NOAA Weather Radio network provides voice broadcasts of local and coastal marine forecasts on a continuous cycle. The forecasts are produced by local National Weather Service Forecast Offices. Coastal stations also broadcast predicted tides and real time observations from buoys and coastal meteorological stations operated by NOAA's National Data Buoy Center. Based on user demand, and where feasible, Offshore and Open Lake forecasts are broadcast as well.

The NOAA Weather Radio network provides near continuous coverage of the coastal U.S., Great Lakes, Hawaii, and populated Alaska coastline. Typical coverage is 25 nautical miles offshore, but may extend much further in certain areas.

